NOVITATES ZOOLOGICAE.

Vol. XXIX. APRIL 1922. No. I.

NOTES ON THE BIRDS OF EAST AFRICA.

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(Plates I to VII.)

INTRODUCTORY NOTES.

THOUGH our knowledge of East African birds has been greatly advanced during recent years by the reports on the collections made by Sir Frederick Jackson and others, yet these reports are based on collections which have been made more or less indiscriminately, in localities which have no direct relationship one to the other, so that a general idea of the distribution could hardly be gained. Further, insufficient material for comparative purposes has rendered it impossible to judge with any accuracy the relationship of the Uganda and East African Avifauna with that of other colonies in Africa.

The recent paper by Claude Grant, *Ibis*, 1915, was the first real attempt to review the birds of East Africa and Uganda (as represented by the Cozens-Lowe collection) in relation to the birds of other parts of Africa. Unfortunately, the collection was somewhat limited and the work has been left unfinished!

Sclater and Praed, *Ibis*, 1918–1919, have contributed much to the elucidation of the ornithological problems of the Sudan.

Until the collections become absolutely representative of the whole of Africa, no comprehensive paper can be written showing the distribution of any species or subspecies all over Africa. We must therefore depend on published reports, and it is in the hopes of being able to throw fresh light on the ornithology of East Africa and Uganda that I have written the following pages, based chiefly on my present collection.

Students of African ornithology may at first sight be surprised that I have recognised so many species and subspecies, and have also in nearly all cases upheld the races created by the late Dr. Mearns (when reporting on the Roosevelt collections, etc.). When these reports first appeared I was sceptical about the possibility of so many new forms, because I accepted as a working basis the works on Jackson's and other collections as correct and representative of the country. I must now admit, however, that since I have studied the ornithology of East Africa and Uganda from the point of view of the field-worker and collector, and from a geographical and topographical point of view, I have had to modify my preconceived ideas considerably.

Considering the position of these countries, it is not surprising to find

that their avifauna is of a very varied and complex nature, therefore during the last eight years I have endeavoured to carry out an ornithological survey of the two countries from the coast up the great lake and westward to Uganda and the Congo border. Owing to the war I was compelled to limit my sphere of operations somewhat, but what I have accomplished has brought to light certain facts of great interest. East Africa has been surveyed more thoroughly than Uganda, and in the main I took as the line of investigation the country on either side of the Uganda Railway from Mombasa to Kisumu, and penetrating as far as possible on either side.

A large amount of material was got together, and the study of this reveals the fact that there are certain more or less defined zoogeographical zones or areas worthy of recognition.

I have endeavoured to illustrate these zones by means of the appended chart, showing a vertical and horizontal section of the Uganda Railway.

The whole of the Western Provinces of Uganda and the central area can be looked upon as West African in character, somewhat modified in type. When we consider the northern territory we find Sudan and South Ethiopian forms represented, and in the eastern districts a mixed avifauna showing South Ethiopian and East African elements.

It should be noted here, however, that birds which may be taken to be typically western in type, find their way into the Elgon area, North Kavirondo, and the Mau Hill, extending more or less southward to what was the old political boundary between Uganda and East Africa.

At this point I should like to draw attention to the extraordinary distribution of certain species which are found on the Elgon-Nandi ranges, and which, although not occurring in Uganda and south of Lake Victoria, yet appear again in the Ruwenzori-Kivu area, in some cases exhibiting no change, in others showing a marked intensification of colour so as to be reckoned as geographical forms. As examples of this we have *Sylvietta leucophrys*, *Trochocercus nigromitratus*, *Chlorophoneus dohertyi*, and *Campothera taeniolaema*.

In the case of East Africa we have to consider Ethiopian, Somali, and South African influences ; but in practically all instances the birds exhibit modifications in plumage justifying the recognition of races.

From this point we naturally come to the consideration of the effect of the climatic and topographical influences on the bird-life of the countries.

The zones or areas, as indicated by the chart, carry in them certain species and forms which are more or less confined to these areas, but it must be understood that these areas are still provisional to a certain extent.

That various factors—such as climate, altitude, etc.—had influence on the evolution of races and species has been long recognised, but insufficient regard has been paid to these points in connection with the birds of East Africa and Uganda. Thus, when they are considered, it is not surprising to find that we must recognise more races and species than hitherto.

The various zoogeographical zones or areas are most marked when we study the distribution of the Larks and the *Cisticolae*.

What I call the " thorn-bush zone " extends throughout the eastern half of East Africa north into eastern Uganda, and encircles on the east the high plain and Alpine zones. But even in this " thorn-bush zone " races of the same form are found, produced no doubt by local conditions.

In addition to my own material, I have been able to make use of a fine collection belonging to A. Blayney Percival, a small collection from the Nairobi Museum, and a collection made by Mr. Allen Turner for Colonel Meinertzhagen, and now mostly in Tring. I have also had specimens of *Cisticola*, which were lent to me by J. Pemberton Cook. For comparative purposes I have had the privilege of using the magnificent material in the Tring Museum, and also more or less that in the British Museum. I wish to express my thanks to Lord Rothschild and Dr. Hartert, to the staff of the Tring Museum, especially Mr. Arthur Goodson, and the staff of the Bird-room in the British Museum, for these privileges and much kind help.

The arrangement follows more or less that of Reichenow's *Vögel Afrikas*, but has been modified in certain instances.

The localities have been grouped according to their political divisions.

My collection, on which this work is founded, contained 15,000 skins of about 1,300 species and subspecies. Included are over ninety European and several Asiatic migrants and winter visitors. Several of the European visitors belong to West European forms; as, for example, the British Yellow Wagtail and the Greenland (and Iceland) Wheatear (Tring, February 1920).

[This important contribution to African Ornithology was first sent to the Editors of the *Ibis* for publication, but was not accepted on account of its bulk and unfinished state. It was written without regard to the present high prices of printing, and, owing to an unfortunate attack of influenza, or something like it, during the latter part of Dr. van Someren's stay in England, the manuscript was indeed not fit for printing, as it was rather hurriedly completed, and the type-written text, evidently not being corrected, was full of slips and wrong spellings of names. I have therefore undertaken the tedious work of cutting out unnecessary lengths and repetitions, filling in and correcting quotations and names, etc., etc. That I have eliminated all errors can, however, hardly be hoped for. That I had to do this was natural, for unexpected work always falls to those who are busiest, but I am glad to have been able to help that van Someren's work could be published. It must be added that 6,490 specimens of the 15,000 on which this treatise is based are now in the Tring Museum, including nearly all the types. The rest has, for the time being, been taken back to Nairobi by Dr. van Someren.

This work has been written in the Tring Museum, where Dr. van Someren worked over half a year, but some weeks were also spent over it in the British Museum.

Though residents in East Africa still distinguish between "British East" and "German East," and will probably long continue to do so, the new official titles of these two countries, "Kenya (or Kenia) Colony" for British East Africa, and "Tanganyika Territory" for German East Africa, are generally used in Dr. van Someren's article.—Ernst Hartert.]

1. **Struthio camelus massaicus** Neum. **East African Ostrich.**

Young birds were brought to me at Naivasha in January 1919, and eggs were found in the Longonot District in November.

2. **Struthio camelus molybdophanes** Rchw. **Somali Ostrich.**

Adults and half-grown young were seen in the open country beyond Archer's Post.

(Struthio ?

A "pigmy Ostrich" has been reported from south of Lake Rudolf, but *no* specimens have been procured.)

3. **Podiceps ruficollis capensis** Licht. **African Little Grebe.**

The amount of white on the wings of adult birds is very variable and not so distinctly distributed as in the European species. In all my adult African specimens, including breeding birds, the underside is pure white, lacking the black mottling so characteristic in northern species.

On practically all lakes and larger swampy, slow-flowing rivers this bird is common and comparatively tame. They are usually seen in couples or small associations.

I am not satisfied that these birds have a non-breeding plumage. I have shot them on a lake at 9,000 feet.

Lakes Nakuru and Naivasha, B.E.A. 4 ♂ 5 ♀ ad., 2 juv., 29.viii.

4. **Podiceps nigricollis** Brehm. **Black-necked Grebe.**

Eggs: Clutch of two.

These birds, although resident and breeding in East Africa, appear not to be separable from European ones, though my specimens are not so black. They are, however, worn. Furthermore, they apparently have no winter or non-breeding plumage. They nest twice a year!

Lake Nakuru, B.E.A. 2 ♂ 2 ♀ ad., 2 juv., all 29.viii.1918.

5. **Colymbus cristatus infuscatus** Salvad. **African Crested Grebe.**

Clutches of three or four eggs, and young in October 1918.

This is a good subspecies. It is resident and breeds on the larger lakes of Uganda and East Africa. There is no winter or non-breeding plumage so far as I can make out. Several pairs nested together in a small area of reeds on Lake Nakuru, and it was here that I was able to observe them going through similar antics to those ably described by E. Selous, in connection with the European bird, in *Wild Life*, and elsewhere. Even when the eggs are well incubated, fresh material is added to the nest—mostly by the male bird. The parent birds are most assiduous in their care for the eggs and young.

Lakes Nakuru and Naivasha, B.E.A. 3 ♂ 2 ♀, 1 pull., 20.x. and December.

6. **Larus fuscus** Linn. **Lesser Black-backed Gull.**

A few adults and young remain throughout the summer, but the majority are young or birds in their second plumage.

Lake Nakuru, Lake Naivasha.

7. **Larus hemprichi** Bruch. **Hemprich's Gull.**

This species is found along the coast, but not very common.

Mombasa and Manda Island. 2 ♀.

8. **Larus cirrhocephalus** Vieill. **Grey-headed Gull.**

Common on the larger sheets of water. The occurrence of *L. ridibundus* in East Africa is doubtful, the recorded birds probably being young of *L. cirrhocephalus*.

Lakes Victoria, Nakuru, Naivasha. 3 ♂, 1 juv.

9. **Sterna media** Horsf. **Lesser Yellow-billed Tern.**

1 ♂ Manda Island, 29.iii.

10. **Sterna bergii** Licht. **Yellow-billed Tern.**

Fair numbers seen along the coast.

Manda Island, March.

11. **Hydrochelidon leucoptera** Meisn. **White-winged Black Tern.**

The two August birds are adults, assuming winter plumage. The May birds are young and show no attempt at assuming summer dress. Adult males in winter plumage have grey tails—as in females. Many birds remain on the lakes throughout the year and do not migrate north.

Lakes Nakuru, Naivasha, and Rudolf. 5 ♂ 5 ♀, January, May, August, December.

12. **Hydrochelidon leucopareia leucopareia** Temm. **Whiskered Tern.**

Not very common.

Lake Naivasha. November.

13. **Gelochelidon nilotica** Horsf. **Gull-billed Tern.**

A winter visitor to the large lakes and coast.

Lamu and Manda Island. 2 ♂♀, April.

14. **Pelecanus rufescens** Gm. **African Pelican.**

A pair frequented the south end of Lake Naivasha for about a week in October 1918, but eventually disappeared.

15. **Pelecanus onocrotalus** Linn. **Common Pelican.**

♂ 12.ii.1917, in perfect full plumage, Lake Naivasha.

16. **Phalacrocorax africanus** Gm. **Lesser African Cormorant.**

Jinja, in Uganda, Lake Naivasha and Kisumu. 4 ♂ 1 ♀, May, August, December.

17. **Phalacrocorax carbo lugubris** Rüpp. **East African Cormorant.**

The area of bare skin of the throat is more extensive than in *P. carbo carbo* and *P. carbo lucidus*.

♂♀, 25.viii. Kisumu.

18. **Nyroca erythrophthalma** Wied. **African Pochard.**

(= *capensis* Less., nec Gm., *brunnea* Eyt.)

Great variation exists in this species. Full-plumaged birds are found in April and November.

♂♀. In full plumage, April and November. ♂ juv., half plumage, May, October, December. ♀ juv., half plumage, February, August, October. There appears to be no eclipse plumage!

Lakes Nakuru and Naivasha, Eldoret. 22 specimens.

19. **Anas sparsa** Eyton. **Black River Duck.**

This species is found on the smaller lakes and rivers. Although adult, my male has no white ring on the neck.

Aberdare Mts. ♂, 10.viii.17.

20. **Anas undulata** Dubois. **Yellow-billed Duck.**

Moulting in November, breeding in February and May. Down of two colours, dark and long, pale and short, is present in females in February and May.

Nakuru Lake, Naivasha and Kimiriri River, Elgon. 6 ♂ 4 ♀.

21. **Anas capensis** Gm. **African Pink-billed Teal.**

The female, although an October bird, had swollen ovaries and a heavy crop of dark down. The female is more uniform on the lower surface than the male.

Nakuru Lake. 2 ♂ ♀, October, November.

22. **Anas punctata** Burch. **Hottentot Teal.**

The down in the female and of those in the Tring Museum is greyish ashy, while that of males is dark brownish black.

Lakes Nakuru and Naivasha. 4 ♂ 1 ♀, February, October, November.

23. **Dafila acuta** Linn. **European Pintail Duck.**

The April male is in full breeding dress. This date is the latest on which I have seen this species. The January bird is in half breeding dress.

Lake Naivasha.

24. **Nyroca fuligula** Linn. **European Tufted Duck.**

This I believe is the first record of this bird so far south. It was shot by Mr. Allen Turner on the Yala River Swamp, Kavirondo, 21.xi.1913.

25. **Querquedula querquedula** Linn. **European Garganey.**

A regular winter visitor. In 1919 most birds had left by April 16th.

Lake Naivasha. 3 ♂ 2 ♀, March, May, October.

26. **Poecilonetta erythrorhyncha** Gm. **African Pintail.**

The November female is in heavy body moult. Dark and pale down is present on the breast.

Lakes Naivasha and Nakuru. November, December.

27. **Spatula clypeata** Linn. **European Shoveller.**

The most extraordinary plumages are met with in Shovellers shot in East Africa. The April 15th male is in full plumage. I have never come across an adult male in full plumage before the end of March. Why this should be, is difficult to explain, unless it is that all the birds which winter with us are birds of the year or previous year. One young male has the feathers of the back barred.

Lakes Nakuru and Naivasha. January, April, November, December (♂ juv.).

28. **Thalassornis leuconotus** Eyt. **White-rumped Diving Duck.**

A male bird shot on February 16th is uniform on the breast, and moulting heavily. The male of October 18th had very large testes, while a female shot on April 15th had an egg in the oviduct. A common bird, keeping to the Lily patches, and very disinclined to take wing.

Lakes Naivasha and Nakuru. February, April, October, December.

29. **Erismatura maccoa** Smith. **Red Diving Duck.**

A female shot in October has moulted all its wing-feathers and is in heavy moult on the body. The other two are in full clean dress. This is not a common species in East Africa.

Lakes Naivasha and Nakuru. 2 ♂ 4 ♀, October, December.

30. **Dendrocygna viduata** Linn. **White-faced Whistling Duck.**

A common species.

Naivasha and Lake Magadi. 2 ♂ 1 ♀, 15.iv.1919.

31. **Dendrocygna fulva** Gm. **Fulvous Whistling Duck.**

Appears to prefer shallow swamps and flooded areas rather than open sheets of deep water.

Kisumu swamp. ♂, 20.iii.1918.

32. **Chenalopex aegyptiacus** Linn. **Egyptian Goose.**

An October male is young, just able to fly. It was seen amongst a flock of at least fifty, all of the same age. There were only three adult birds with them.

Naivasha and Kisumu.

33. **Sarkidiornis melanotus africanus** Hartl. **Knob-billed Goose.**

Lakes Naivasha and Nakuru. 3 ♂ 1 ♀.

34. **Plectropterus gambensis** Linn. **Spur-winged Goose.**

My male has the entire head and neck and the whole breast black or green-black.

Kisumu and Lake Nakuru and Naivasha. 1 ♂ 3 ♀, June, November.

35. **Balearica regulorum gibbericeps** Rchw. **East African Crowned Crane.**

Very common. Seen either in pairs or flocks, usually in the vicinity of water.

Kisumu. 1 juv., 17.i.1916.

36. **Threskiornis aethiopica** Lath. **Sacred Ibis.**

Very common on the larger sheets of water, but occasionally frequenting the smaller streams and swamps. A small flock of six haunted the swamp by the Nairobi River for nearly a month. The February specimen is young, still retaining part of the spotted plumage, and has the neck and head feathered. Full-plumaged breeding males develop long straw-coloured plumes on the flanks.

Kisumu, Naivasha, Nairobi. ♂ juv. 16.ii., ♂ June, ♀ April.

37. **Plegadis falcinellus** Linn. **European Glossy Ibis.**

The May bird is in perfect full dress. Fairly common.

Naivasha Lake and Kisumu. 2 ♂ May, December, ♀ December.

38. **Oreoibis akleyorum** Chapman. **Kenia Ibis.**

Described from Kenia and Aberdare Mountains. An adult male was obtained by W. Noel van Someren on the slopes of Mt. Kenia, 6,500 feet, 18.i.1921.

39. **Hagedashia hagedash nilotica** Neum. **Northern Great Glossy Ibis.**

I have provisionally recognised this race, though I fail to appreciate the differences between these birds and East African specimens. My material is, however, very limited, 2 ♂ 1 ♀ only.

Masindi and Entebbe in Uganda.

40. **Hagedashia hagedash erlangeri** Neum. **East African Great Glossy Ibis.**

Lake Jipe and Naivasha.

41. **Platalea leucorodia leucorodia** Linn. **European Spoonbill.**

A male belonging to the European species, having black legs and the feathering of the crown extending down between the eyes in a point; shot Lake Naivasha, 15.ii.1918. Large numbers winter on the larger lakes.

42. **Platalea alba** Scop. **African Spoonbill.**

A female was shot off its nest April 10th, containing two eggs. Not particularly common, though more were seen on Lake Nakuru than elsewhere.

Kisumu, Lakes Nakuru and Naivasha.

43. **Ardea cinerea cinerea** Linn. **European Grey Heron.**

Migrants are found during the winter months, but the bird is not resident in East Africa.

44. **Ardea melanocephala** Vig. **Black Crowned Grey Heron.**

A common species on the lakes and larger rivers and swamps.
Lakes Nakuru and Naivasha.

45. **Ardea goliath** Cretzschm. **Giant Heron.**

Not very common.
Lake Naivasha. ♂, April 1916.

46. **Ardea gularis** Bosc.

Has been recorded from Zanzibar and Witu (Jackson).

47. **Ardea purpurea purpurea** Linn. **Purple Heron.**

Very common. A resident and breeding species.
Kisumu and Lake Naivasha.

48. **Melanophoyx ardesiaca** Wagl. **Black Heron.**

Common on the coast of Tanganyika Territory. A few extending to the Pangani region.
Dar-es-Salaam (Loveridge leg.).

49. **Mesophoyx intermedius brachyrhynchus** Brehm. **Short-billed White Heron.**

Quite common on Lake Victoria and the larger lakes, but also found on the smaller swamps.
Nairobi, Kisumu, Nakuru.

50. **Egretta alba** Linn. **European White Heron.**

Winter visitor. Not resident, so far as my observations go.

51. **Bubulcus ibis** Linn. **Cattle Egret.**

Very common. Sometimes found miles from water.

52. **Egretta garzetta** Linn. **Egret.**

A common species found from the coast throughout East Africa and Uganda in suitable localities.

53. **Ardeola ralloides** Scop. **Buff-backed Heron.**

Very common along the shores of the larger lakes, Naivasha and others.

54. **Ardeola idae** Hartl. **Striped-backed Heron.**

It is remarkable to find this species so far inland as Nairobi. The only two specimens I have seen and shot were along the banks of small streams, not by lakes. It is a rare bird.

Nairobi and Kijabe. 10.vii.1915, 20.x.1916.

55. **Butorides atricapilla** Afz. **Green-backed Heron.**

Very common.

56. **Erythrocnus rufiventris** Sund. **Chestnut Heron.**

Not very common. Is found along the shores of Lake Victoria.

Entebbe. 18.xi.1917.

57. **Ardetta sturmi** Wagl. **Little Blue Heron.**

Not by any means common. It occurs along swamps, by little streams, and also along lake sides.

Nairobi River, Lake Victoria, Kisumu. 2 ♂ collected, May, November.

58. **Ardetta minuta payesi** Hartl. **Little Black-backed Heron.**

Kisumu in British East Africa, Sezibwa and S. Ankole in Uganda. January, August, September.

59. **Tigrisoma leucolaema** Rchw.

This bird was described from Ukerewe Island on Lake Victoria. I have no specimens.

(**Botaurus stellaris** L. **Bittern.**

I have no records of the occurrence of the Bittern in East Africa or Uganda.)

60. **Nycticorax nycticorax** Linn. **Night Heron.**

Occurs in East Africa on migration, and is said to be resident also.

61. **Scopus umbretta bannermani** C. Grant. **East African Hammerkopp.**

A pair was caught on the nest at Kisumu, 17.vi.1915. Common on swampy ground and small collections of water.

62. **Balaeniceps rex** Gould. **Shoebilled Stork.**

Is fairly common on Lake Kioga in Uganda, nesting in the sudd on that lake.

63. **Ciconia ciconia** Linn. **White Stork.**

Very common; large flocks spend the winter months on the plains of Kavirondo and Ukamba. A bird which had been ringed in Hungary was shot at Eldoret in Uasingishu district.

64. **Ciconia nigra** Linn. **Black Stork.**

A large flock was seen in the Kisumu district in December 1917.

65. **Abdimia abdimi** Licht. **Purple Stork.**

Common in the Nile district of Uganda.

66. **Dissoura episcopus microscelis** Gray. **White-headed Stork.**

Has been recorded from several localities in Uganda and East Africa : Lamu Kipini, Naivasha, and Masindi.

67. **Mycteria senegalensis** Shaw. **Saddle-billed Stork.**

Occurs on the lakes and larger rivers, but is not common.

68. **Leptoptilus crumeniferus** Less. **Marabou Stork.**

Common in suitable localities.

69. **Anastomus lamelligerus** Temm. **Open-billed Ibis.**

Very common in the Kavirondo district. Kisumu.

70. **Tantalus ibis** Linn. **Wood Ibis.**

Commoner in the Nile district, Uganda, and Lake Albert than in East Africa but occurs on the Tana and Juba Rivers and is common on Lake Rudolf.

71. **Phoenicopterus roseus** Pall. **Greater Flamingo.**

Very common on Lakes Rudolf and Baringo, also occurs on Naivasha and Nakuru.

72. **Phoenicopterus minor** Geoffr. **Lesser Flamingo.**

A common species on Lakes Rudolf, Baringo, Nakuru, Naivasha, and Magadi, and the lakes in West Uganda. Breed on Nakuru in large numbers. Young obtained in October and November. 20.x.1916, adults.

73. **Glareola pratincola fülleborni** Neum. **East African Pratincole.**

Few in second plumage, 15.i.1917, adults January and May.

With a series of *G. p. fülleborni* and *G. p. limbata* laid out side by side, it is obvious that they are distinct. It is, however, difficult to define their exact distribution. From the specimens before me it would appear that in East Africa and Uganda, *G. p. fülleborni* occurs along the coast and inland to Victoria Nyanza and Lake Rudolf. It is possible that *G. p. limbata* extends into North Uganda, but I have no specimens from this locality. *G. p. fülleborni*, besides being darker on the breast, back, and under wing coverts than *G. p. limbata*, lacks the indication of a collar on the hind neck. The amount of ochraceous on the under surface appears to vary with age, the younger birds being pure white on the lower breast

and abdomen. It is important that the breeding range of the two subspecies should be ascertained and information as to migratory movements—if any—collected. Wings, 183–204 mm.

N. of Mombasa to Lamu, Lakes Victoria and Rudolf.

(**Glareola pratincola pratincola. European Pratincole.**

Does not occur in East Africa or Uganda—although reported. These specimens should refer to the previous subspecies !)

74. **Glareola nordmanni** Fisch. **Black-winged Pratincole.**

Seth-Smith collected this form in North Uganda, at Gondokoro, in 1916, and remarks that they appeared in large numbers between April 14th and 18th, and then left. Wings, 193–202 mm.

75. **Glareola ocularis** Verr. **Madagascar Pratincole.**

This species has been reported from the coast of East Africa: Lamu, September 11th, Jackson coll.

76. **Glareola nuchalis** Gray. **White-ringed Pratincole.**

? *Glareola emini* Shell.

It seems to me very doubtful whether *G. nuchalis* and *G. emini* are distinct.

Entebbe and Jinga in Uganda. 2 ♂, 1.viii.17 and 7.v.18.

77. **Cursorius somalensis** Shelley. **Somali Grey-naped Courser.**

♂, 13.iii.1918. Turkwell River, H. J. A. Turner leg., Meinertzhagen coll.

This specimen appears to me not to differ from birds collected in Somaliland.

The occurrence of this species in Turkana and south-west Lake Rudolf district extends its range considerably. Wings, 125–134 mm.

78. **Cursorius temminckii** Sw. **Temminck's Courser.**

Claude Grant, *Ibis*, 1915, draws attention to the three specimens collected by the Cozens-Lowe Expedition in Uganda and East Africa, and remarks that they are rather darker on the back than West or South African birds. This is also the case in my five specimens. In addition, my specimens seem to have the black abdominal patch larger in extent—more longitudinal and reaching almost to the vent. However, this may be due to preparation. Transvaal birds are palest.

There is considerable variation on the under-surface, some specimens lacking the ashy-olive tinge on the breast. These birds are found from sea-level to well over 8,500 feet. Wings, 118–125 mm.

Coast of East Africa, Lamu inland to Taveta, Simba, Nakuru, and Eldoret in B.E.A., South Ankole in Uganda. 4 ♂ 2 ♀, January, May, August, September.

79. **Rhinoptilus chalcopterus obscurus** Neum. **Southern Purple-winged Courser.**

Apparently a good subspecies. Two full-plumaged males, Nairobi, 3.v.1917 and 26.v.1919.

80. **Rhinoptilus africanus gracilis** Fisch. and Rchw. **Little Two-banded Courser.**

Frequents the open, rocky plains and dry bush country. Not very common. Taveta, Magadi, Loita. 3 ♂ 1 ♀, 5.viii.; 12, 23.xii.

81. **Rhinoptilus africanus hartingi** Sharpe. **Lesser Two-banded Courser.**

This form occurs in the Juba district of British East Africa.

82. **Rhinoptilus cinctus cinctus** Heugl. **Three-banded Courser.**

At first glance it would appear that Somaliland specimens are paler on the upperside, but these can be matched with birds from East Africa.

Suk Country, Turkana, and Kerio River. 4 ♂ 1 ♀, 6.iv.1917; 1 ♀, 4.i.1918.

83. **Squatarola helvetica** Linn. **Grey Plover.**

Specimens shot during the same month represent various degrees of moult. Thus we find that a male procured in March is almost in full nuptial dress, while others obtained in April show as yet very little signs of change from winter to summer.

Lamu and Manda Islands. Coast of mainland. ♂ ♀, March and April.

84. **Charadrius geoffroyi** Wagl. **Heavy-billed Dotterel.**

Five birds, with the exception of two males collected in April, are in winter dress. The moult apparently extends over a lengthened period, some birds taking longer than others. A male taken 17.iv.1916 is still in full winter plumage. So far as I know, this species has not been taken on the inland waters of East Africa or Uganda.

Coast of East Africa, especially Lamu and district. March, April, January.

85. **Charadrius asiaticus** Pall. **Caspian Plover.**

This is perhaps the most common wader found inland, frequently miles from water. On open veldt and newly ploughed land they occur in flocks, but in my experience seldom stay long in one place.

Coast lands, Nairobi, Kisumu, Naivasha, Eldoret. 3 ♂, January, September.

86. **Charadrius mongolus atrifrons** Wagl. **Black-fronted Sand Dotterel.**

Specimens collected in March are almost in full breeding plumage. They occur commonly along the coast and occasionally inland on the larger lakes. Wings, 120–127 mm.

Lake Victoria, coast land Mombasa, Lamu. 5 ♂ ♀, January, March.

(*Charadrius mongolus mongolus* does not migrate to East Africa.)

87. **Charadrius marginatus** Vieill. **Pale-backed Sand Plover.**

? *C. pallidus* Strickl.

Rather paler than birds from Angola, but one or two worn specimens from that country agree in coloration. Madagascar birds, however, are paler, like the East African specimens; a series should be compared. Wings, 100–103 mm.

Lamu and mainland coast [Jubaland, A. B. Percival coll.]. ♂♀, April, December, in fresh plumage.

88. **Charadrius varius varius** Vieill. **African Sand Plover.**

This species is found in East Africa along the coast and inland, frequenting the lake shores and banks or rivers and streams where there are open beaches and banks. It is, however, more a bird of the lakes than the Three-collared Plover. Full-plumaged adults vary considerably from worn specimens, the difference being particularly noticeable on the breast.

Lamu, Manda, Nairobi, Lakes Nakuru and Naivasha. 8 ♂ 3 ♀, February, April, May, June.

89. **Charadrius venustus** Fisch. and Rchw. **Massai Sand Plover.**

To the original description should be added the following: In adult males there is an indication of a narrow black band separating the white of the throat from the pale chestnut breast band. In clean, freshly moulted males the chestnut of the posterior part of the superciliary stripe is extended back to the nape, forming a collar. The young bird has the feathers of the mantle and wing-coverts tipped with pale greyish. It lacks the black-and-brown frontal bands, and on the breast has an incomplete band of an ashy brown.

This Plover is apparently confined to the Soda Lakes of East Africa and very rare in collections. The plumage of newly moulted birds is soon bleached by the action of the soda in the water.

Magadi Lake. 3 ♂, 2 ♀, 1 juv. (20.xi.1917) obtained.

90, 91. **Charadrius hiaticula hiaticula** Linn. **and Charadrius hiaticula tundrae** Lowe. **Ringed Plover.**

In a series of fifteen East African specimens pale and dark birds are represented, and as both the typical and eastern forms are migrants to Africa south of the equator, both subspecies might occur. It is noticeable that November to January birds are paler than February to April specimens, and some of the latter are as pale as the typical form.

Wings: ♂ 122, 123, 124, 126, 127, 128, 129; ♀ 118, 121, 126, 127, 118 mm.

Nairobi, Nakuru Lake, Naivasha Lake, Mombasa. 5 ♂, 2 ♀.

92. **Charadrius dubius curonicus** Gmel. **Little Ringed Plover.**

The localities from which my specimens were taken extend its winter range. February birds are still in first plumage.

Victoria Nyanza, Kisumu, and Lake Rudolf (S.W.). 3 ♂ 2 ♀, February, March.

93. **Charadrius tricollaris** Vieill. **Three-collared Ringed Plover.**

Eggs: Clutches three and two taken 17.ix.1918.

A young bird, 16.x.17, is heavily spotted on the back, the feathers being margined and barred with pale buff; remains of down are present on the hind neck and on the tips of the rectrices. Very common on lakes and suitable streams.

Nairobi, Simba, and Lakes Nakuru and Naivasha. 3 ♂, 2 ♀, 1 juv., the last 16.x.1917.

94. **Stephanibyx melanopterus minor** Zedlitz. **Large Grey-breasted Plover.**

This form appears to be separable, but certain North-East African birds are not any larger than East African examples.

East African: wings, 215–218; North-east African: 218–230 mm.

The nestlings in down have the forehead buff with a few black spots, head and upper surface of body mixed black and buff, neck with a decided white collar, chin, sides of head and lower surface of body white, sides of head and body washed buff. Tips of bill brownish. They resemble very closely the young of our common Lapwing. Frequents the plains rather than water-side.

Nairobi, Nakuru, and Naivasha. 2 ♂ 3 ♀, May and October. Nestlings, 16.v.1918.

95. **Stephanibyx lugubris** Less. (= *S. inornatus* Swains.). **Lesser Grey-breasted Plover.**

Claude Grant, *Ibis*, 1915, points out that the correct name for this bird is *S. lugubris*, not *inornatus*.—Birds from the coast districts of East Africa have rather narrower black bands separating the grey breast from the white abdomen. In some cases the black is entirely absent. Wing, 160–184 mm.

Lamu and Nambeziwa, Uganda. 2 ♂, 8.v.1916, 14.x.1917.

96. **Stephanibyx coronatus** Bodd. **Crowned Lapwing.**

East African specimens do not appear to differ from South African birds. Wings, 193–198 mm. Young in the first barred plumage show more indication of the ultimate plumage than do others of this group. The specimen taken 12.viii.1915 has still a large amount of down. It is pale sandy buff on the upperside and breast, faintly barred with blackish. A dark band separates the buff of the breast from the white of the rest of the underside. Central pair of tail-feathers uniform black, the remainder tipped white—all retain the down at the tip. The cap is indicated by a whitish centre mixed with buff and margined with black. The soft parts of the bill and the legs are yellowish pink.

M'buyuni Plains, Simba, Nairobi. 3 ♂, 1 ♀, 1 juv.

97. **Hemiparra crassirostris** Hartl. **Thick-billed Plover.**

Masindi, Uganda. ♂♀ in full, fresh plumage, 15.xi.1918.

(**Hemiparra leucoptera** Rehw. **White-winged Thick-billed Plover.**

Is said to occur in Uganda, but I do not think it does.)

98. **Hoplopterus spinosus** L. **Egyptian Spur-winged Plover.**

Fully adult birds were taken at Lake Rudolf, January and December. Kobua River, Lake Rudolf, and Moroto.

99. **Hoplopterus armatus** Burch. **Saddle-backed Plover.**

(*H. speciosus* is synonym.)

Very common along the shores of Lakes Nakuru and Naivasha. Naivasha and Nakuru. 2 ♂, June, October.

100. **Sarciophorous tectus** Bodd. **Crested Wattled Plover.**

From the series (21 skins) with which I have compared my few birds it would appear that those from North-east Africa and Abyssinia are paler on the upperside than birds from the Senegal, the type locality of *S. tectus*. The East African (inland) and Uganda birds resemble the Senegal ones. It must, however, be noticed that our North-east African birds are clean and hardly worn, while the Senegal ones before me appear stained with earthy material.

A comparative table of wing-measurements gives the following:

North-east Africa, eight specimens, 190–198 mm.

Senegal, nine specimens, 185–195 mm.

Uganda, East Africa, four specimens, 180–187 mm.

Near Mt. Moroto, Turkwell River, Kerio River. Specimens collected in January, October, November.

101. **Sarciophorus tectus latifrons** Rchw. **White-fronted Wattled Plover.**

Reichenow has separated the birds from the east coast near the Juba River under the above name, giving as their differentiating characters the wide frontal band, the paler plumage, and smaller size: wings, 175 mm. In the Tring Museum there is a specimen from the type locality which bears out these characters except in size: wing, 183 mm. Zedlitz upholds this subspecies and quotes several examples, and includes birds from the Ukamba district of British East Africa. Claude Grant, *Ibis*, 1915, doubts the validity of this form, but is in error when he compares eastern and western birds.

102. **Sarciophorus superciliosus** Rchw. **Chestnut-banded Wattled Plover.**

Of this rare plover I collected three adult males in full plumage and with the olive-bronze feathers of the back margined with rusty. The adult female has the lower edge of the chestnut breast-band margined with black. Reichenow appears to have used an immature bird for his original description. Two young birds, shot 22.viii.1917, near Kisumu (where these birds breed), differ considerably from the adults, being paler on the upper side and having paler upper breasts and necks; the breast-band is only slightly indicated with a few brownish feathers. The rufous on the forehead is wider than in adults and extends back as a superciliary stripe to almost the nape. The crown is ashy greyish, not black as in adults. The wattles are present, but not well developed.

Kisumu. 3 ♂ 2 ♀, August and December.

103. **Lobivanellus senegalus lateralis** A. Sm. **Black-billed Wattle Plover.**

Claude Grant, *Ibis*, 1915, recording a bird from Gondokoro as *L. senegalus*, states that it " has not yet assumed the black on the abdomen," and thinks it to be immature. If the bird is *L. senegalus senegalus* it never would develop the black abdomen! All the specimens that I have taken in Uganda have black abdomens and are *L. senegalus lateralis*! Neumann, however, in *O.M.*, 1914, p. 8, includes Uganda in his distribution of *L. senegalus senegalus*. It may occur there, but I doubt it.

L. senegalus major Neum., N.E. Africa, is a much larger bird, and a recognisable race.

Masindi, Singo. 2 ♂, April, December.

104. **Burhinus oedicnemus oedicnemus** Linn. **European Stone Plover.**

Appears to be a regular winter visitor to East Africa. I have records of its occurrence during five years. They are, however, not common.

Kyambu and Naivasha Lake. Taken in January and October.

105. **Burhinus senegalensis** Swains. **Senegal Stone Curlew.**

My birds undoubtedly belong to the Senegal race. Whether or not the Eastern bird differs, I am unable to decide from the material available.

W. Lake Rudolf, Kobua, and Meuressi. ♂ ♀, February, March.

106. **Burhinus vermiculatus** Cab. **African Stone Curlew.**

Occurred in fair numbers on the coast at Lamu and on the mainland at M'Koi. Is very common in Uganda.

Lamu. 2 ♂ ♀, April.

107. **Burhinus capensis capensis** Licht. **Cape Spotted Stone Curlew.**

My specimens agree with typical birds and not with *B. capensis affinis*. They are resident and breed in East Africa. Several pairs nested on the stony ground of the Athi plains.

Nairobi River. June, October.

108. **Burhinus capensis affinis** Rüpp. **Somali Spotted Stone Curlew.**

Zedlitz (*Journ. f. Orn.*, 1914) states that this form extends to the Victoria Nyanza. This requires verification. Birds from Baringo and Lake Rudolf may belong to this race. (Cf. Hartert, Nov. Zool. 1921, p. 88.)

109. **Dromas ardeola** Payk. **Crab Plover.**

Common on the coast in suitable places. A very immature bird was taken at Manda Island on 6.iv.1916.

Mombasa, Lamu, Manda Island.

110. **Recurvirostra avosetta** Linn. **Avocet.**

Resident on Lakes Nakuru and Naivasha. The specimen collected was taken at Njoro about twenty miles north of Nakuru, not in the vicinity of water, on May 17th, 1917.

111. **Himantopus himantopus** Linn. **Black-winged Stilt.**

Resident on Lakes Nakuru and Naivasha.

112. **Numenius arquatus arquatus** Linn. **Common Curlew.**

Many birds remain on the coast throughout the summer. The bill of the largest female measures 180 mm., and of the smallest male 127 (measured straight). Occurs also on inland waters.

Mombasa, Manda Island. April.

113. **Numenius phaeopus phaeopus** Linn. **Whimbrel.**

Fair numbers winter along the lakes and coast.

Manda, Lake Nakuru. February, April, August.

114. **Terekia cinerea** Güld. **Terek Sandpiper.**

In full breeding plumage in March, at Lamu.

115. **Machetes pugnax** Linn. **Ruff.**

An August bird is still in summer plumage and has not commenced to moult; it shows little sign of wear, while the young taken with it is in first immature plumage.

Nakuru Lake, Nairobi. Taken also in October.

116. **Tringa nebularia** Gunn. **Green Shank.**

March and April birds are in full nuptial dress. Common on inland waters and in flocks along the coast.

Eldoret, Nakuru, Naivasha, Lamu and Manda Island.

117. **Tringa totanus** Linn. **Red-shank.**

Has been noted at Zanzibar and Mombasa, but I have not obtained specimens.

118. **Tringa stagnatilis** Bechst. **Marsh Sandpiper.**

The male of 17.iii.1917 is to all intents in full breeding dress, while the May birds are showing very little signs of change. In my opinion, these latter are probably young of the previous summer and quite a number of these *do not leave* their winter quarters in the summer. An August bird has so worn the pale edges of the mantle feathers as to appear almost black in the interscapular region, and yet shows little indication of a moult. My October and December birds are young of the previous summer and are becoming light grey on the upperside.

Obtained at Nakuru and Naivasha Lakes, Eldoret, Kisumu, and Nairobi River.

119. **Tringa ochropus** Linn. **Green Sandpiper.**

Specimens shot in January, February, September, October, and December are in various plumages, but none approaching the full nuptial dress. A few remain throughout the summer.

Entebbe and Magani in Uganda, Nairobi, Kisumu, Lakes Nakuru and Naivasha.

120. **Tringa glareola** Linn. **Wood Sandpiper.**

Odd birds remain in East Africa during the spring and summer.

Kisumu, Nakuru, Naivasha, Nairobi, and Lake Jipe, in East Africa; Budu and S. Aukole in Uganda. February, March, October, December.

121. **Tringa hypoleucos** Linn. **Common Sandpiper.**

Some birds remain throughout the year in suitable localities.

Kisumu, Nakuru, Naivasha, Nairobi, Simba, Tsavo, Lamu, and Manda Island.

122. **Crocethia alba** Pall. **Sanderling.**

An October bird is a young one in first plumage, while April birds are in half summer dress, though one April male is still in winter garb.

Found on coast and inland waters.

Nakuru, Mombasa, and Lamu. April, October, January.

123. **Calidris canutus** Linn. **Knot.**

Recorded from Zanzibar. I have not collected specimens.

124. **Arenaria interpres** L. **Turnstone.**

Occurs along the coast during winter, and is occasionally found on the larger lakes.

Jubaland coast. ♂ ♀, December.

125. **Calidris alpina** Linn. **Dunlin.**

Has been recorded from the coast and inland waters, but I have seen no specimens.

126. **Calidris ferruginea** Brünn. **Curlew Sandpiper.**

The birds collected between April and May vary from specimens in new summer dress to others still in full winter and showing no indication of moult. August and October birds are young of the same year.

Kisumu, Nakuru, Naivasha, Lamu, and Manda Island. 4 ♂, 2 ♀, 2 juv., collected April, May, August, October, December.

127. **Calidris minuta minuta** Leisl. **Little Stint.**

The assumption of the breeding dress is not limited to any given period; thus among the May birds we have some not yet started to moult and others in nuptial plumage. As with other "migratory waders," I am convinced that here

also the late moulting birds are young of the previous summer, and of these many would not leave their winter haunts. I have been unable to collect birds in June and July, because I have not been in favourable districts during these months. On my return to Africa I hope to rectify this omission.

Coast of East Africa, Mombasa, Lamu, Nairobi River, N'gong Ditch, Naivasha, Nakuru, and Kisumu. 10 ♂ 11 ♀, shot in February, May, August, September, October, and December.

128. **Gallinago media** Lath. **Great Snipe.**

As a rule the Great Snipe leave Kisumu area on May 28th, but in the spring of 1917 they were still in evidence as late as June 15th. It was an exceptionally wet period, and floods were common. My heaviest bird weighed 8¼ oz.; it was covered with a thick layer of fat. Numbers remain in East Africa during the winter. Cf. next species.

Nairobi, Naivasha, Nakuru, Kisumu. 2 ♂ 3 ♀, collected in April, May, December.

129. **Gallinago gallinago gallinago** Linn. **Common Snipe.**

A few Common Snipe remain throughout the winter in suitable localities, but the majority which are shot are those passing south or north on migration. Cf. previous species.

Nairobi, Nakuru, Naivasha. May, October, December.

130. **Gallinago gallinago nigripennis** Bp. **African Snipe.**

I have found this species breeding at altitudes from 3,400 to 9,000 feet.

Nairobi River, Lakes Narasha, Naivasha, and Nakuru. 3 ♂ 2 ♀, shot September and December.

131. **Limnocryptes minima** Brünn. (*gallinula* auct.). **Jack Snipe.**

The occurrence of the Jack Snipe in East Africa extends its known winter range very considerably. I have only met with it twice, and shot two males 23.x.1918, 20.xii.1916. It is not a common visitor, and whether it is a regular migrant to these parts has yet to be ascertained.

Lakes Nakuru and Naivasha.

132. **Rostratula benghalensis** Linn. **Painted Snipe.**

Breeds regularly in suitable places in East Africa.

Nairobi, Nakuru, Kisumu. April, May.

133. **Phyllopezus africanus** Gm. **African Jacana.**

Mombasa (mainland), Kisumu. January, May, September.

134. **Microparra capensis** Smith. **Pigmy Jacana.**

On two occasions I saw what I took to be this species on Victoria Nyanza. The identification is probably correct, as the bird had been obtained by Sir F. Jackson on Naivasha Lake.

135. **Rallus coerulescens** Gm. **African Long-billed Rail.**

Two males and others from East Africa are rather paler than birds from South Africa, and have the throats whitish, not grey like the rest of the underside.

They are *adult* birds, and possibly a northern form.

Nairobi, Simba.

136. **Crex crex** Linn. **Land Rail.**

The majority of those seen are birds on their way south and north. I have specimens from Nairobi, Kisumu, Kyamba, and Simba, shot in April and December.

137. **Crecopsis egregia** Pet. **African Water Rail.**

It is rather remarkable that so few specimens of this bird are obtained, and it was only by accident that my two specimens were procured while snipe shooting in May.

Kisumu Swamp.

138. **Limnocorax niger** Gm. **Black Rail.**

The nestling in down (10.xii.1917) is oily green-black on the upperside, dull sooty-black below. Legs brownish horn. Upper mandible pink with a black band midway, lower black with pink tip. In first feathered plumage the bird is dull black, paler, more brownish underneath, becoming whitish on the belly. Bill black-brown with indication of pink.

Nairobi, Fort Hall, Kisumu, and Jinja in Uganda.

139. **Porzana porzana** Linn. **European Spotted Crake.**

Two specimens obtained in February and April are both adult, yet are examples of extremes in plumage. The female bird, evidently in full breeding dress, is very heavily speckled all over, including the secondary and tertiary coverts. The male, on the other hand, is without spots from chin to the vent, the abdomen being almost uniform creamy. The wing coverts have very few spots. There is a large series of this bird in the Tring Museum, yet not one exactly like my male bird.

Londiani and Nairobi.

140. **Porzana pusilla obscura** Neum. **African Little Spotted Crake.**

A ♀, 14.i.1918, is an interesting specimen, being a bird changing from the first or juvenile plumage to the adult. The grey which is appearing on the head and throat is paler than in southern birds. I suspect that the northern birds are distinct.

Collected by my friend J. P. Cook on Lake Naivasha.

141. **Sarothrura rufa elizabethae** van Someren. **Van Someren's Pigmy Rail.** (Pl. I.).

Bull. B.O. Club, xl. p. 20, 1919.

The bird recorded under the name of *S. r. bonapartei* (*Ibis*, 1916) was identified for me by Ogilvie-Grant. I have now procured three males and an adult female.

I drew attention to the fact that my single specimen from Kyetume, Uganda, did not have a white or pale throat, as *S. bonapartei* has, according to the original description; but the whole of the head, neck, and chest were uniform bright chestnut. Now, with the additional material, it is evident that young males have pale throats and paler chestnut foreparts than adults. The type of *S. bonapartei* comes from Gabun, far removed from the locality where I procured my specimen and in view of the fact that these Rails are very local—two distinct species occurring in close proximity—it would not be unreasonable to suggest that the Kakamega and Kyetume birds are not typical *S. rufa bonapartei*. There are in the Tring Museum two males and two females from Angola, collected by Ansorge, which are not true *S. rufa*, nor yet are they *S. rufa bonapartei* as they—the females—have uniform black tails, not spotted. These females differ considerably from my female, though the males are scarcely separable. I consider these to be a new subspecies of *S. rufa*.

The birds are not *S. r. bonapartei*, specimens of which I have examined, for that bird has the chestnut of the head and forepart of the body pale, more orange-chestnut. I accordingly have named the Uganda and Kavirondo birds *S. rufa elizabethae*. (*Bull. B.O.C.*, November 1919.)

Uganda to North Kavirondo and Nandi.

S. rufa ansorgei van Someren, *Bull. B.O. Club*, November 1919, inhabits Angola.

The ♀ from Kisumu cannot be *S. lugens*, as the description of that bird does not fit and *S. lugens* is larger, having a wing of 83 mm. as compared with 78 mm. of my bird. It differs from ♀ of *S. rufa rufa* of Cape Colony by being blacker on the upper surface, the buff markings are coarser, the tail is closely spotted and barred. The males differ from *S. rufa rufa* ♂ in being rather more whitish on the underside and the bill is slightly smaller. The males have wings of 75–80 mm.

In the three Kavirondo males it is at once noted that the youngest bird is less spotted and streaked on the wings than adults, further that the tail is practically uniform, one or so spots being present. In the second, not quite mature bird the abdomen is white and the throat paler than the breast, but this is not so in the old male. In the British Museum is an adult male shot at Kampala by Seth Smith.

Kyetume, Kisumu, Kakamegoes.

142. **Sarothrura somereni** Bannerman. **Bannerman's Pigmy Rail.** (Pl. I.).

Bull. B.O. Club, xl. p. 8, 1919.

I do not think this bird can be *S. böhmi* Rchw., type locality Likulwe River; for although agreeing superficially with the description, my birds differ in such characters as the markings and measurements (Reichenow compares *S. böhmi* with *S. rufa* and *S. bonapartei*). The white markings on the wings are not small, but very large white streaks. The outer web of the first primary is pure white. My birds have wings of 84–87 mm. as compared to 80 mm. in *S. böhmi*; tails of 30–32 mm. instead of 40.

Further, Kisumu and Nairobi are far removed from Likulwe, and these birds are very local.

Since the above was written a female bird, procured by Dr. Hind at Machakos, undoubtedly belonging to this species, and totally different from any

known female, has been described by Bannerman in *Bull. B.O. Club*, November 1919, as the type of a new species to which my male birds belong.

Kisumu and Nairobi, East Africa. 3 ♂, May 1916.

143. **Sarothrura pulchra centralis** Neum. **Uganda Pigmy Rail.**

I wish to draw attention to the variation in the spotting and barring of the tail feathers of this bird.

Lugalambo, Bugoma, Mabira ; Kakamegoes, Nandi.

144. **Sarothrura elegans reichenowi** Sharpe. **Reichenow's Pigmy Rail.**

The specimen referred to by me in *Ibis*, 1916, remains the only one obtained by me or my collectors. It is apparently very rare. I consider this a good race of *S. elegans*.

Kyetume, Uganda. ♂ 20.ii.1912.

145. **Porphyrio madagascariensis** Lath. **African Purple Swamp Hen.**

Dr. Hartert has shown, Nov. Zool. xxiv. 1917, that the continental bird does not differ from that from Madagascar, consequently the name above must be applied to all.

These birds were breeding in October 1918 on Naivasha Lake.

146. **Porphyrio alleni.** Thomps. **Little Purple Swamp Hen.**

A nest with eggs and young was observed at Naivasha Lake, in October 1918. Not very common and rather retiring in habits.

147. **Gallinula chloropus brachyptera** Brehm. **African Water Hen.**

The name above must be applied to the African form of *G. chloropus* in preference to *G. c. meridionalis*. (Vide Hartert, Nov. Zool. xxiv. 1917.) A December bird is in moult and is just beginning to renew the wing feathers.

Simba and Lake Naivasha.

148. **Gallinula angulata** Anders. **Lesser African Water Hen.**

Extremely shy and difficult to procure. I obtained the eggs of this bird in June 1917, and adult ♂ ♂ in April and May, on the Nairobi River.

149. **Fulica cristata** Gm. **African Coot.**

The young collected in December is a bird of October hatching. These birds nested on Lake Naivasha.

Naivasha and Nakuru Lakes.

150. **Podica petersi** Hartl. **Peter's Finfoot.**

A pair were seen on a small lake just north of Mombasa, but I was unable to procure them with my small-bore gun.

151. **Podica senegalensis** ? subsp. **East African Finfoot.**

On several occasions a small Finfoot was observed on the Thika and Ruiru Rivers.

152. **Turnix nana** Sund. **Dark-backed Button Quail.**

Reichenow does not include Uganda in the distribution of this species. It is possible that Uganda birds will prove to be a subspecies, but insufficient material exists at present on which to form an opinion.

Kyetume, Uganda. ♂, 12.iv.1914.

153. **Ortyxelus meiffreni** Vieill.

Has been taken on the Turkwell River, but is a very rare bird.

154. **Turnix sylvaticus alleni** Mearns. **East African Button Quail.**

Of the various characters mentioned by Mearns, the more intense rusty colour on the breast and its extent are the only ones which can be accepted. Even these are variable and can be matched by South African *lepurana*. Owing to lack of South African material I am unable to come to any definite conclusion as to the validity of this subspecies. Mearns gives the wing measurement of his type as 70 mm. My specimens measure ♂♂ 75, ♀♀ 80–83.

Simba, Samburu, and Kisumu. 2 ♂ 3 ♀, January, May, July.

155. **Pterocles gutturalis saturatior** Hart. **Eastern Yellow-throated Sand Grouse.**

An excellent subspecies. Fairly common in suitable localities.

Simba and Kyambu. 2 ♂, collected 18.viii.1918.

156. **Pterocles decoratus decoratus** Cab. **Bridled Sand Grouse.**

Two birds from the Suk Country do not differ from those found in the Taru district. Common.

Kimiriri River, South Elgon, Suk Hills, Taveta, M'buyuni, and Simba. 8 ♂ 3 ♀, January to December.

157. **Pterocles senegalensis olivascens** Hart. **Massai Pin-tailed Sand Grouse.**

These specimens agree perfectly with the type of *P. senegalensis olivascens* (type locality Simba). They are very much darker than birds from Somaliland and Egypt. This is what one would expect. However, C. Grant (*Ibis*, 1915) identifies his birds from thirty miles north of Baringo as "*P. exustus ellioti*," which he believes is the older name for Hartert's *P. exustus somalicus*. Hartert's type and co-types were exceptionally small birds, as shown by a good series of additional material from North Somaliland. These resemble the type in being paler, but they agree in size with birds from the Sudan, which are darker than Somaliland ones, though not so dark as birds from Turkana and Simba. Abyssinian specimens are pale like Somali ones, and thus *P. s. ellioti* must be used for birds from these two countries. Are the Baringo birds *P. s. ellioti*, or are they *P. s. olivascens* and thus similar to my Turkana birds ? The locality of senegalensis is given as Senegal, Nubia, and Abyssinia. This species, however, does

not occur in Senegal, and as the Abyssinian birds are the pale *P. s. ellioti*, we accept Nubian ones as typical.

Simba (three specimens), Meuressi, Turkwell, South Turkana (two specimens).

The range of the forms are then : *P. exustus exustus*, Nubia (dark birds). *P. exustus floweri*, Egypt (still darker, not quite so dark as *olivascens*). *P. exustus ellioti*, Abyssinia, Somaliland (pale birds). *P. exustus olivascens*, East Africa North to Uganda (darkest form).

158. **Numida coronata reichenowi** Grant. **Reichenow's Helmeted Guinea Fowl.**

Birds from Fort Hall district are rather puzzling. They have the helmet curved and have no papillae at the base of the bill, while birds from the Loita Plains are just the reverse, but also with no nasal tuft, while the Nakuru birds have differently shaped helmets ; this has been called :

Numida " *ptilorhyncha* " *ansorgei* Hartert, 1898. Ansorge's Guinea Fowl, App. Under Af. Sun., 1898 (sbsp. of *coronata*).

I have placed *ptilorhyncha* in inverted commas because Hartert, in his original description (from one specimen), among other characters of diagnostic value mentions that the bird possessed " caruncles " at the base of the bill. I have examined the type and also topo-types, and all certainly agree in having caruncles or bristles. There is one specimen, however, which has no bristles. I think the evidence is in support of the type of *N. ansorgei* belonging to the " *ptilorhyncha* " group. and not " *coronata* " or " *mitrata*."

The character of the wing is as in *N. ptilorhyncha major* Neum., i.e. spotted, not with a decided white bar as in *N. ptilorhyncha ptilorhyncha*. Assuming these observations to be correct, in what relation does this bird stand to *N. p. rendilis* Lönnberg (with syn. *N. p. baringoensis* C. Grant) ?

N. coronata Rchw. occurs just south of Nakuru and at Naivasha, but do these birds flock together and do they interbreed ? More specimens are required ! *N. ansorgei* has priority over both *N. rendilis* and *N. baringoensis*.

In Tring are specimens from Nakuru and Elmenteita Lake.

159. **Numida ptilorhyncha rendilis** Lönnberg. **Rendile Tufted Guinea Fowl.**

(*N. p. baringoensis* !)

The relationship of this Guinea Fowl is still in doubt !

Suk Hills and Baringo.

160. **Numida mitrata** Pall. **Coast Guinea Fowl.**

? *N. uhehensis* Rchw.

One specimen from Makindo may belong to this species or Reichenow's subspecies *N. m. uhehensis*, if that race can be upheld.

Makindo in Tanganyika Territory.

161. **Acryllium vulturinum** Hardw. **Vulture-like Guinea Fowl.**

Common in the dry desert scrub.

Tsavo, Masongoleni.

162. **Guttera cristata suahelica** Neum. **East African Blue Guinea Fowl.**

A doubtful form. More material required.
N'gong by Nairobi.

163. **Guttera cristata seth-smithi** Neum. **Uganda Blue Guinea Fowl.**

The young in first plumage is as follows: The head is ochraceous buff, lined with black—a centre line commences at the base of the bill, passes back over the crown, and at the top of the head widens out to form a large black patch on hind part of the crown and neck; a narrow black line commences at the nostril and in the region of the lores divides into two—one passing up over the eye, where it breaks up into a mottled supereiliary stripe, the other skirting the edges of the bill—passes below the eye to end in a mottled area in the region of the ear. The throat is pale buff. Feathers of the mantle and coverts of wing rusty brown, lined on the outer web with black and margined with ochraceous. The secondaries are greyish, finely speckled with black and tipped with pale buff. Primaries greyish black, tipped with buff. The breast feathers and those of the flanks are blackish, widely edged with rusty and buff. Abdomen greyish. Bill horn brown. Legs brownish.

Mabira Forest, Uganda.

164. **Guttera pucherani** Hartl. **Scrub Black-crested Guinea Fowl.**

Lamu and Malindi, Taveta. 2 ♂ 1 ♀, January, April, August.

165. **Pternistes leucoscepus infuscatus** Cab. **Orange-throated Francolin.**

P. l. keniensis Mearns.

It is quite obvious that this bird varies greatly, and that these variations do not occur according to locality, but are due to age, sex, and the soil. Mearns, in describing the Kenia bird, gives certain characters by which this form can be distinguished from *P. l. infuscatus*. These may be found in all birds occurring over 6,000 feet on Kenia, but they are also found in birds from the Kyambu district, from Maktau, from Lake Jipe (type locality *P. l. infuscatus*) and Taveta, and from the localities as mentioned by Mearns as being inhabited by intergrades—*i.e.* Saba Saba and Fort Hall. Then he goes on to say that the birds from Wambugu's are typical *P. l. infuscatus*. This is extraordinary, as Wambugu's lies between the locality of *P. l. keniensis* and that of *infuscatus*. Therefore I doubt that his "keniensis" can be upheld. My thirteen specimens are from the following places: West Kenia, Embu, Fort Hall, Saba Saba, Kyambu, Nairobi, Simba, M'buyuni, Taveta, and Lake Jipe.

166. **Pternistes cranchi** Leach. **Cranch's Red-throated Francolin.**

The distribution of this and *P. böhmi* is rather remarkable, if the localities given by Reichenow are correct.

Muhuroni, east Victoria Nyanza. 3 ♂ 1 ♀.

167. Pternistes humboldti Peters. **Humboldt's Red-throated Francolin.**

? *P. h. melanogaster* Neum.

There is much variation in birds from one locality, and I cannot with confidence state whether these birds are typical or not.

3 ♂ ♀, Mombasa, Lamu (mainland).

168. **Francolinus squamatus schütti** Cab. **Schütt's Scaly Francolin.**

♂, 4.ix.15; 17 ♀, 27.vii.1917, 3.ix.1915.

South Ankole, Kyetume, Lugalambo, and Elgon.

169. **Francolinus squamatus maranensis** Mearns. **Kilimanjaro Scaly Francolin.**

3 ♂, 17.x.1917; ♀, 19.x.1917; juv., 3.v.1915.

The arrangement adopted in Tring of placing *F. schütti* as a subspecies of *F. squamatus* appears to be correct. Of the various subspecies described by Mearns, the only one which appears good is *F. s. maranensis*, but even here my specimens do not bear out the characters given by him for this bird. Specimens from the Kilimanjaro district (south-east) do not possess brown tails "broadly barred with black," nor have they the outer primaries "mottled and pencilled with rust brown." The tails of my birds are brown, finely vermiculated and freckled with black, and the outer web of primaries is uniform. The distribution of *F. s. maranensis* as given by C. Grant (*Ibis*, 1915) appears to embrace too large an area, or else *F. s. maranensis* is not a good subspecies. It appears to me, from the series before me (Uganda 8, East Africa 11), that the differences in the series are very slight, and Uganda birds can be matched exactly by East African and *vice versa*, and these not from localities where the two subspecies might be expected to meet and interbreed! Further, my series does not bear out C. Grant's remark that the females of the East African birds are uniformly paler on the underside than males, and that Uganda males and females are more alike in this respect. In dividing Francolins into races one should never omit to take into consideration age, moult, and of course sex, and most certainly also character of soil of country inhabited. There is the tendency for old males of the *schütti* group to become more uniform on the underside, the central brown patch on the feathers being diminished in size and the submarginal longitudinal white or creamy white line disappearing. Old females follow the same change.

The young in down is as follows: Upper surface bright chestnut, slightly mottled with black on the back. Head with two buff lines commencing at the base of the bill, passing one on either side of the chestnut coronal patch which is outlined in black, form wide superciliary stripes, and continuing down to the nape, join each other. Along the sides of the back, from about the middle, pale lines continue to the tail. There is a short black line posterior to the eye. The under surface is bright sandy, not yellowish, and washed with brownish on the breast and flanks. Thighs mottled sandy and brown. Bill horny yellow, culmen brown. Legs pink. Cf. young of *P. infuscatus* and *hildebrandti*.

Kyambu, Fort Hall, Kenia, and Molo.

Although my birds do not conform to the distribution given by Mearns for his races of *squamatus*, yet it is more than probable that we shall have to adopt certain of the names applied, i.e. *keniensis*, *maranensis*, and ? *zappeyi*. There are

three district races in East Africa: (*a*) a form inhabiting the plains and scrub from Kilimanjaro east to the cultivated lands of the N. Ukambo and N'gong districts; (*b*) a race inhabiting the highlands from Kenia, Aberdares, and the Mau Escarpment; and (*c*) a marked form, ranging in the Loita district and S. Kavirondo area to Kisii. More material is required to establish these races.

170. **Francolinus jacksoni** Grant. **Jackson's Francolin.**

In perfect plumage in August.
Aberdare Mountains.

171. **Francolinus icterorhynchus** Heugl. **Uganda Striped Francolin.**

F. i. emini Neum.
F. i. ugandensis Neum.

Some males have chestnut on the flanks, others not. Even with fresh material, I am unable to arrive at a different conclusion from that published in *Ibis*, 1916. The specimens available to C. Grant (*Ibis*, 1915) may have led him to support *F. i. emini* as a good subspecies, but my series—and the material in Tring (including typical *F. icterorhynchus*)—certainly suggest that the birds from West Uganda are similar to those from East Uganda, as far as Elgon, and that *F. i. emini* is not a good race. C. Grant does not mention *F. i. ugandensis* from Chagwe in Uganda—and this is important, because whereas *Francolinus i. emini* was described from just west of Lake Albert, *F. ugandensis* was described from Chagwe Prov. I do not know whether Neumann made *F. ugandensis* a species, and not a subspecies, on account of the fact that *emini* and *ugandensis* forms occur together, but they certainly do; and further, from east to west both occur, as also many intermediates. *F. ugandensis* is a full-plumaged bird in the dark phase, *F. emini* a bird in the light striped plumage. If the two forms were true in extremes of distribution and at their meeting-line intermediates occurred, it would be understandable, but this is not the case with the series before me. I suggest that they are all united.

The material available includes birds from Toro and Masindi, besides the localities mentioned by me in *Ibis*, 1916, and Kawala, Kyama Buremezi, and Kyanja in Uganda.

Young in down: Very much like the young of *F. schütti*, but paler throughout, especially on the crown and underside.

172. **Francolinus hildebrandti hildebrandti** Cab. **Hildebrandt's Francolin.**

Kibwezi. ♂, 4.vii.; ♀, 13.viii.1918.
Apparently typical birds, small coveys seen in the bush country.

173. **Francolinus hildebrandti altumi** Fisch. and Rchw. **Naivasha Francolin.**

C. Grant (*Ibis*, 1915) has stated his reasons for retaining the Northern birds as a subspecies, and with his remarks I agree. The young in down are very like those of *F. schütti*, but paler throughout and more mottled in the wings, and yellowish sandy below. There is a distinct black stripe passing right through the eye from lores to ear-coverts.

Naivasha, Nakuru and Escarpment, January, November.

174. **Francolinus uluensis** O.-Grant. **Ulu Francolin.**

Simba and Saba Saba, Fort Hall.

175. **Francolinus streptophorus** O.-Grant. **Nzoia Francolin.**

A very local and rare species.
Elgon (South). 2 ♂, 12.iii.1917, collected by Turner.

176. **Francolinus gedgei** O.-Grant. **Gedge's Francolin.**

Although somewhat resembling *F. icterorhynchus* and occurring in the same locality, this bird is perfectly distinct.

177. **Francolinus elgonensis** O.-Grant. **Elgon Chestnut-bellied Francolin.**

The occurrence of this species on Elgon and Kenia at about 10,000 feet is most remarkable, especially as its nearest relations appear to be *F. shelleyi* and *F. crawshayi*.

Very local, and apparently rare in collections.

178. **Francolinus levaillanti kikuyuensis** O.-Grant. **Freckle-neck Francolin.**

F. l. mulemae O.-Grant.

Ogilvie-Grant, in describing *F. kikuyuensis*, states that the chin and throat are "rufous white"; and again, in contrasting *F. mulemae* with *F. kikuyuensis*, emphasises the point and says the latter "always has the entire chin and throat suffused with buff." Now, in comparing my birds I find my three specimens of *Francolinus kikuyuensis* have the chin and throat pure white, much more so than my three specimens of *F. mulemae*. The colour of the throat appears to be the main difference between *F. kikuyuensis* and *F. mulemae*, but, as I have shown, this character is not reliable, because not constant. To emphasise this point I might mention that of four specimens of *Francolinus levaillanti* two have buff throats and two white just tinged with buff.

As regards wing measurements, my Uganda specimens have wings: ♀ 162, ♂ 165–166. Eldoret birds, ♀ 168, ♂ 168–170.

Thus even the difference in size is so very slight that I am inclined to consider *F. mulemae* and *F. kikuyuensis* synonymous. Dr. Hartert, who has examined my birds and the type and co-types, agrees with my remarks.

C. Grant has been misled in thinking the type locality of *F. kikuyuensis* is the Kikuyu district. It came from the Uasingishu. (*Vide* Jackson, *Journal E.A. and U. Nat. Hist. Society*, vol. i. No. 1).

"*F. l. kikuyuensis*": Eldoret, Uasingishu, and Burnt Forest.

"*F. l. mulemae*": Banda, Mpumu, Entebbe.

Francolinus levaillanti benguellensis Neum.

The type compared with *F. mulemae* Grant has, as Neumann points out, this difference, that, whereas *F. mulemae* has a distinct rusty collar on the hind neck, this bird has the barred black and white feathers of the lower neck carried up in the form of a narrow line, to the crown. This is the only difference! It *may*

hold good, but is surely very variable, for if one compares a series of *F. levaillanti*, it will be seen that some have the rusty collar interrupted and some have not! So also in *F. l. kikuyuensis*, though here the line is blackish when it exists, not barred, and some birds have perfect collars.)

179. **Francolinus coqui** A. Sm. **Coast Golden-headed Francolin.**

The range of this species in East Africa requires careful study, as also does the next mentioned.

Mombasa, S. Ankole in Uganda.

It is strange that the Coqui Francolin should have entered into S.W. Uganda and be, presumably, indistinguishable from the coast bird. It is true that Ankole birds are more rufous on the mantle and rump, but they can be matched with Natal birds. Some typical birds have rufous throats, others have *white* throats.*

180. **Francolinus coqui hubbardi** Grant. **Hubbard's Francolin.**

Nakuru Plains, and Loita. ♂ ♀, May.

181. **Francolinus sephaena granti** Hartl. **Grant's Red-legged Bush Francolin.**

I brought home a series of 13 ♂ ad., 6 ♀ ad., and 2 juv. from various months, in the hope that I might be able to clear up some of the confusion into which the "*sephaena*" group of Francolins has fallen. I laid out the series which the Tring Museum possesses into the races which were admitted. It planned out nicely, but when I added my specimens according to localities, the whole arrangement was upset. Taking as a basis the papers by Zedlitz, *Journ. f. Orn.*, 1914, and that by C. Grant, *Ibis*, 1915, and attempting to reconcile their conclusions to the series before me, I am led to vote provisionally in favour of Grant's results, but I have insufficient material of typical *F. s. granti*. The three specimens from Dodoma are not identical and can be matched by birds from the Kisumu area. Taking the described races singly I find:

F. s. ochrogaster Hartl.: Birds from West Uganda and the Nile province—Gondokoro, Nimuli—can be matched by birds from Tsavo. It is not a case of being able to pick out one from a particular district and matching it with another from a place far removed, but with the series before me, three or so can be so matched. The North Uganda birds are dark sandy below, but not constantly so, and in size do not differ from Tsavo birds.

F. s. icteropus—schoanus (= *spilogaster*, Abyssinia): Can be kept separate on account of its large size, but in the series of birds from this locality none have indications of a speckled underside.

F. s. dilutescens (Mearns) from Kenia: Are not any larger than birds from Tsavo and Chamgamwe, and resemble them in colour.

F. s. jubaensis Zedlitz: Supposed to extend from Jubaland south to Ukamba and Mombasa, covering an area where birds of marked variations occur and which do not bear out the characters mentioned by Zedlitz for his subspecies. If we omit the Ukamba and Mombasa birds, then we may admit a

* In between S.W. Uganda and the coast we find an accepted race of *F. coqui*, that is *F. c. hubbardi*. It is possible that there is a line of continuous distribution through Tanganyika Territory of which we have no information.

South Somali coast race, but of two old males collected on the Tana River, one has very freckled and lined pale sandy feathers on the underside and the other has this area ochraceous-sandy with a few marks. However, a series of seven males and nine females from Lamu, Manda, and M'koi on the mainland are very pale on the underside, and have narrow chestnut spots on the rib area of the feathers of the breast and abdomen (not as in *F. rovuma* = *kirki*).

This series is extraordinarily uniform, but the two specimens from the Tana appear to upset this form, though the two races probably meet here. The birds from Mombasa and Mazeras cannot be distinguished from birds from Tsavo and Taveta. Size, except in the case of Abyssinian birds, appears in this case to be very variable, and not a reliable character. Odd birds from between Tsavo and Mombasa have large chestnut spots and stripes on the lower breast, but they are not *F. rovuma*, because they do not possess the characteristic large black spots on the secondaries, but show the close relationship of these species.

F. s. granti : Dodoma, Tanganyika Territory.

F. s. ochrogaster : Nile Province, Uganda, Mt. Moroto, Meuressi, Turkwell in Uganda, Kisumu.

F. s. dilutescens : Kenia and Embu.

? *F. s. granti :* Chamgamwe, Mombasa, Kiu, Tsavo, Taveta, M'buyuni.

F. s. jubaensis : Lamu, Manda, M'koi, and north bank of lower Tana River.

182. **Francolinus rovuma** Gray. **Chestnut-spotted Bush Francolin.**

F. kirki Hartl.

C. Grant (*Ibis*, 1915) states that the older name for this species is *rovuma* Gray. It must, however, be recalled that the term Zanzibar used to include a large tract of the mainland coast in olden times, and it is quite possible that, although the name "*kirki*" was applied to a bird from Zanzibar, it need not necessarily have come from the *Island* of that name. Further, Dr. Aders of Zanzibar assures me that there are no Francolins on Zanzibar Island ! I am not convinced therefore that this change is advisable.

My 4 ♂ and 3 ♀ (April, July, November) are all typical ones. They possess the characteristic large black areas on the inner secondaries and coverts and scapulars, besides having bars on the undertail coverts. Young males and some females have arrow-shaped head marks on the latter. Birds from Kitui, M'koi, and Tsavo, though showing chestnut marks on the underside, lack the characters mentioned above.

South Mombasa (mainland, Vanga district), Dar-es-Salaam.

183. **Francolinus lathami schubotzi** Rchw. **Schubotz' Forest Francolin.**

I have nothing fresh to add to my notes on this species (*Ibis*, 1916), except to record the occurrence in the Bugoma and Budongo Forests east of Lake Albert.

Bugoma, Budongo, Lugalambo, in Uganda (Mabira Forest, S. Uganda, Belgian Congo). 2 ♂ 4 ♀, January, October.

184. **Francolinus nahani** Dubois. **Nahan's Forest Francolin.**

Here, again, the range of this Francolin is extended, the former records being only Ituri, Belgian Congo, and Mabira Forest in Chagwe. The new localities are Bugoma and Budongo, east of Lake Albert. 2 ♂, January, December.

185. **Ptilopachus fuscus florentiae** O.-Grant. **Rock Francolin.**

A very large specimen was obtained, 28.i.1918, at Mt. Moroto, in Uganda.

186. **Coturnix coturnix coturnix** Linn. **European Quail.**

An undoubted specimen of the European Quail was obtained at Kisumu, 22.xii.1915. Dr. Hartert, who has recently made a study of this group, endorses my identification. Wings, 112 mm.

The European Quail is not a common migrant to East Africa, and most of the records for this species refer to *C. c. africana*, which is a resident bird.

187. **Coturnix coturnix africana** Temm. **African Quail.**

C. c. capensis Gray.

This resident form varies to some extent, some males being as pale on the throat as European birds, but they are smaller. Wings, 96 mm. They were breeding in June.

W. Kenia, Kyambu, Embu.

188. **Coturnix delegorguei** Hartl. **Delegorgue's Black-breasted Quail.**

There is a great amount of variation in the females. This appears not to be due to season, but possibly to age. Two breeding females are very heavily spotted on the breast and upper abdomen, while another is apparently assuming male plumage. Others, again, have the breast heavily washed with olive-grey, others are almost uniform brownish.

Buff stripes on the feathers of the underside of males are a sign of immaturity. These birds when kept in captivity are very prolific, one female laying 150 eggs! During the flighting of these birds over Nairobi, dozens are injured or killed by the telephone-wires.

Kisumu, Nairobi, Nakuru, Ngong, Kimiriri River, Elgon, Suk.

189. **Excalfactoria adansoni** Verr. **Painted Quail.**

These birds are resident and breed in East Africa and Uganda. They are not common. I obtained two females at Mawakota, Uganda, and Nyarondo, East Africa.

190. **Neotis cafra** Licht. **Stanley's Bustard.**

Insufficient typical material prevents me from deciding whether or not these birds should be united with the South African form. Fairly common, though not seen in larger numbers than twos or threes.

Lakes Nakuru and Naivasha, Loita. 2 ♂ 2 ♀.

191. **Otis hartlaubi** Heugl. **Uganda Little Bustard.**

? *O. maculipennis* Cab.

Occurs in the northern parts of Uganda and East Africa.

192. **Otis senegalensis canicollis** Rchw.

Fairly numerous in the dry scrub country and the Loita district. I am not satisfied that *somaliensis* is a synonym.

Tsavo, Simba. ♂♀, June, August.

193. **Otis melanogaster** Rüpp. **Black-bellied Bustard.**

? *O. lovati* Grant.

Fairly plentiful in the open grass country of the plains and highlands. I am unable to say whether *lovati* is separable.

Fort Hall and Kyambu.

194. **Otis kori struthiunculus** Neum. **Northern Kori Bustard.**

Not very common, but usually seen in the same localities as Stanley's Bustard. The type is from S. Abyssinia.

195. **Afrotis gindiana** Oust. **Yellow-tufted Bustard.**

Frequents the dry thorn-bush country from the coast to south Lake Rudolf.

Juba River. (A. B. Percival coll.)

196. **Treron calva salvadorii** Dub. **Salvadori's Large-cered Green Fruit Pigeon.**

This form apparently extends from West Tanganyika (the type locality) to Uganda and east to North Kenya Colony, as far south as the Elgeyu escarpment, where apparently it meets with the next subspecies.

Elgon, Burnt Forest, Elgeyu in East Africa, Budongo, Sezibwa, Jinga, and Kagera River in Uganda. 4 ♂ 3 ♀.

197. **Treton calva brevicera** Hart. & Goodson. **East African Short-cered Green Pigeon.**

The principal difference between this and the foregoing subspecies is the small "cere" or basal portion of the bill. One never meets with a large-cered bird in this form. The other differences mentioned by the authors do not hold good in all cases, and no great reliance can be placed on them. The distribution is German and British East Africa, north to Elgeyu, where it meets *T. c. salvadorii*.

The nestling is dull green above, with bright edges to the feathers. Wings as in adult, but without the purplish patch on "shoulder" and of a much duller green. Under-surface covered with greyish down, through which yellow-green feathers are showing, under tail-coverts uniform buff.

Kyambu, Fort Hall, Saba Saba, Embu, Thika, Nairobi, and Kiu.

198. **Treron wakefieldi wakefieldi** Sharpe. **Wakefield's Green-tailed Green Pigeon.**

Four typical birds, with wings of 145–152 mm., March and April. Gunning and Robert's subspecies, *T. w. orientalis*, from Portuguese East Africa is larger.

Mombasa, Lamu, Manda Island.

199. **Treron delalandei granti** van Someren. **Coastal Green-tailed Green Pigeon.**

Bull. B.O. Club, November 1919.

Darker than birds from Transvaal and Natal, and considerably smaller. Wing, 157–160 mm., as against 178–190 mm. in Natal birds.

Mombasa, Dar-es-Salaam.

200. **Columba unicincta** Cass. **Grey Forest Pigeon.**

Very uncommon. 1 ♀ specimen in full plumage, shot on the Sezibwa River.

201. **Columba guinea longipennis** Rchw. **Speckle-necked Rock Pigeon.**

The wing measurements of 1 ♂ and 3 ♀♀ are 220–232 mm. It is doubtful whether this form can be recognised.

Kaimosi, Nyarondo, Elgon, Naivasha, Kisumu.

202. **Columba arquatrix** Temm. **Speckled Forest Pigeon.**

? *C. albinucha* Sassi.

The whole of my series of 3 ♂ and 5 ♀ (January, June, September) are hardly so reddish on the back as birds from South Africa (Knysna Forest), and have a distinct greenish sheen on the inner secondaries and coverts, which in southern birds are dull brownish. The size does not differ. Is *albinucha* a species or a variety ?

Fort Hall, Kyambu, Nairobi, Burnt Forest, Elgon.

203. **Turturoena sharpei** Salvad. **Sharpe's White-necked Pigeon.**

T. harterti Neum.

The history of this species is interesting. The type, a head and neck only, was collected on Mt. Elgon by Sir F. Jackson. It was described as new by Count Salvadori in the *Cat. Birds Brit. Mus.*, xxi. 1893. This was a rash proceeding, but it is an instance where a rash and hasty description, based on wholly inadequate material, has been confirmed. Further, the characters given by Salvadori as warranting the separation are not valid. Compared with *T. delegorguei* Hartl., it was stated that the new species had a metallic green lustre on the head and neck, not purplish green-bronze. This, as I shall show, is not constant. In 1894 Lord Rothschild received a complete skin of a *Turturoena* which he believed to belong to *T. sharpei*, and he described and figured the entire bird in NOVITATES ZOOLOGICAE, 1894. In his determination Lord Rothschild was correct. A second adult was received from Doherty in 1901, from Escarpment, which was like the Nguru specimen. Neumann, however, in 1898 described a bird from Kilimanjaro as *T. harterti*, as his two females did not agree with any known species of *Turturoena* (*Journ. f. Orn.*, 1898, p. 287, pl. 2). In 1916 I sent Dr. Hartert three skins, 1 male and 2 females, from Mt. Elgon. These, coming from the type locality of *T. sharpei*, were identified as complete adults of that species. They had black backs, so naturally, as the Kilimanjaro and Escarpment birds had reddish backs, the question arose as to whether the bird figured by Lord Rothschild was really *T. sharpei*. The assumption was that it

was not; the only other name for Kilimanjaro and Escarpment birds was Neumann's *T. harterti*—though the figure of *T. harterti* in *Journ. f. Orn.*, 1898, was misleading, the colouring being much overdone. With the material I brought home with me (fourteen skins) I have been able to show that the Elgon birds do not differ from those of Kilimanjaro and Nguru, and that *T. sharpei*, as the oldest name, must be adopted for all of them. On Mt. Elgon we get red-backed and black-backed birds which cannot be distinguished from specimens from Escarpment, Nairobi, or Kyambu, and still further they are identical with birds from Kilimanjaro and Nguru in coloration and size! From the same locality we get males with green and others with purplish bronze heads, some with metallic sheen to the red of the back, some without. Some have velvet black backs, others black with greenish reflections. Similarly, the presence or absence of metallic sheen on the under-surface is variable. The young male is very like the adult female, but the coppery bronze of the head is dulled by the greyish tips to the feathers.

T. delegorguei from Natal appears to be separable only on account of its size. Reichenow gives the wings as 170–190 mm. My specimens, however, have wings 165–182 mm.

Elgon, Nairobi, Kyambu, Thika, Kilimanjaro, Nguru, Escarpment.

(Turturoena incerta Salvad.

A specimen which died in the Zoological Gardens, locality unknown, must surely be a female of *T. delegorguei*, as the description tallies, and the only other bird it could possibly be is *T. sharpei*, a most improbable thing. This bird could hardly have come from Elgon!)

204. **Haplopelia larvata larvata** Temm. **Cinnamon-breasted Forest Dove.**

H. l. kilimensis Neum.

Bannerman, in reviewing the genus *Haplopelia* (*Ibis*, 1916) gives the distribution of the typical form as from the Cape to N'guruman and Kenya Colony, including the latter on the evidence of a single skin procured by Mackinder on Mt. Kenya, of which he says, "It is the only specimen known from north of Nyassaland." Apparently Bannerman did not consult the Tring collection, where there are three skins, collected by Doherty at Escarpment in 1901, and further he apparently overlooked *H. larvata kilimensis* Neum. 1898 from Kilimanjaro. Neumann claimed that his was the first example procured north of Nyassaland. In *Ibis*, 1916, I recorded *H. larvata* from Nairobi. As it happens, Bannerman's statements are correct, because with the material before me I cannot separate the typical birds and specimens from East Africa north to Elgon. Therefore I place *T. larvata kilimensis* as a synonym of *T. larvata larvata*. The size appears the same, southern specimens having wings of 145–150 and East African 145–152 mm.

Nairobi, Kyambu, Kakamgoes, and W. Elgon. 6 ♂♀.

205. **Haplopelia simplex jacksoni** Sharpe. **Uganda Grey-breasted Forest Dove.**

A ♂ obtained 11.xii.1918 in Budongo Forest, Uganda, shows traces of the young plumage on the abdomen.

206. **Tympanistria tympanistria fraseri** Bp. **Fraser's White-breasted Dove.**

A good subspecies. Young males moult from the barred plumage into adult dress in one moult.

Kyambu, Nairobi; Lugalambo, Sezibwa, Kyetume, Budongo. 7 ♂ 2 ♀.

207. **Turtur chalcospilos** ? subsp. **Emerald-spotted Ground Dove.**

I am not satisfied that this group can be separated into as many subspecies as has been done. Even with the large series at Tring it appears difficult. Owing to the lack of specimens from certain type localities, I refrain from identifying my birds with certainty with any given subspecies. The Portuguese East African birds (2 ♂♀) are interesting, as they are darker on the underside than East African specimens and the wing speculum is not constantly green; in one bird the spots are purply blue, in another half blue, half green, in the other two green!

Going by localities, there would be amongst my birds:

East Africa: *T. c. acanthina* Oberh.

Lamu and Tana: *T. c. somalica* Erl.

Lumbo Port, E.A.: *T. c.* ? subsp. *caffra*.

Nairobi, Taveta, M'buyuni, Tsavo, Lamu, Mombasa, Dar-es-Salaam, and Lumbo in Portuguese East Africa.

208. **Turtur afer sclateri** Rothsch. **Uganda Blue-spotted Ground Dove.**

An excellent pale race.

Toro, Masindi, South Ankole. 4 ♂ ad.

209. **Oena capensis** Linn. **Long-tailed Ground Dove.**

Oberholser described a subspecies, *O. c. anomyna*, from East Kilimanjaro, which does not appear to be valid. Some birds have blue, others purple speculum.

M'buyuni, Taveta, Simba, Kisumu, Maungu. 5 ♂ 2 ♀.

210. **Streptopelia senegalensis senegalensis** Linn. **Speckled-neck Dove.**

Zedlitz divided these birds into several races, but variation being considerable, some of the forms cannot be upheld.

Kendu Bay, Kisumu, Fort Hall, Nairobi, Tsavo, Maungu. 8 ♂♀.

211. **Streptopelia capicola tropica** Rchw. **Uganda White-vented Dove.**

212. **S. c. electra** Mad. **East African White-vented Dove.**

My series includes birds which I recognise as belonging to two distinct races of *S. capicola*. I do not agree with C. Grant that *S. c. tropica* of Reichenow cannot be separated from *S. capicola damarensis*. One has only to lay out a series of birds from typical localities to recognise that they are separable. With regard to birds from East Africa south of the Kavirondo Plains, I am not surprised to find a difficulty in placing them with any known race, as they are intermediate. They are greyer, less tinged with vinous on the breast, yet are as dark on the

upper surface as *T. capicola tropica*. The females are more whitish on the abdomen and not so greyish. In this they resemble *S. capicola capicola*, and thus are darker than *S. capicola damarensis*, and would probably be *electra* of Madarasz.

The distribution of these two forms, as evidenced by the series, is as follows :

S. capicola tropica : Albert Lake, through Uganda to Elgon and Kavirondo south to Muhoroni. Wings, 145–157 mm.

S. capicola electra Madarasz : Lumbwa, south to the Athi Plains, and Simba. Wings, 140–156 mm.

213. Streptopelia capicola somalica Erl. Somali White-bellied Dove.

These are pale birds, paler on the back than *S. c. tropica*, and cleaner vinous on the breast. The most pronounced feature is the great extent of white on the lower surface, extending well over half the underside. The wings are paler grey than *S. c. tropica*. Wings, 145–157 mm.

The distribution within East Africa is : Plains east of Kilimanjaro—the Taru Desert and South-east Ukamba.

S. capicola somalica : Samburu, Masongoleni, Tsavo, M'buyuni, Taveta, and Mungu to S. Somaliland.

214. Streptopelia decipiens permista. White-vented Red-eyed Dove.

A quite distinct subspecies, with whitish belly and almost white under tail-coverts.

Kendu Bay, Speke's Gulf. 2 ♂, August.

215. Streptopelia decipiens shelleyi ? Grey-vented Red-eyed Dove.

These are the birds to which I referred in my paper in the *Ibis*, 1916, as not being typical *T. semitorquatus* ; but I had then overlooked the "*decipiens*" group. They differ in being darker, especially on the flanks and abdomen, and in having the under tail-coverts much greyer.

South Ankole and Karagwe. 2 ♂ 1 ♀.

216. Streptopelia reichenowi Erl. Juba Grey Dove.

♂♀, December 1912. This is a very good species ; the whole bar on the wing is very marked when the birds fly.

Juba River. (A. B. Percival coll.)

217. Streptopelia semitorquata semitorquata Linn. Grey-vented Dove.

There appears to be little difference between birds of the *semitorquatus* group from various parts of Africa, except from the coast of South Somaliland, Jubaland, and Tanaland, which I refer to later. These birds enumerated above would be *S. s. intermedius* Erl., if this subspecies were valid. 7 ♂♀.

Nairobi, Thika in East Africa ; Bugoma, Budongo, and Masindi in Uganda.

218. **Streptopelia semitorquata minor** Erl. **Coastal Grey-vented Dove.**

This I consider a good subspecies, thus disagreeing with C. Grant (*Ibis*, 1915), who unites it with the typical form. It is altogether paler, above and below, has paler under wing- and under tail-coverts, also a decided grey rump, in my specimens. The head is not so rosy, but more pale grey.

M'koi, Lamu, and Kismayu.

219. **Streptopelia lugens funebrea** van Someren. **Black Turtle Dove.**

Bull. B.O. Club, xl. p. 21, 1919.

Very much like *S. lugens lugens*, but smaller and altogether darker. The pinkish buff on the throat and lower breast not so extensive, the grey of the crop and abdomen darker. The under tail-coverts and under wing-coverts much darker. Wings, 170–180; in *S. lugens lugens* 185–192 mm.

Nairobi, Elgon, Burnt Forest, Elgeyu, and Kyambu, south to Kilimanjaro.

220. **Streptopelia lugens** subsp. nov. ?

In South Ethiopia is found an intermediate race which is not so pale as *S. lugens lugens*, but not so dark as the subspecies described above, though of about the same size. Wings, 170–185 mm. I have not named this, as I have not ascertained the range, which, however, appears to be South Ethiopia to Turkana and north Lake Rudolf.

221. **Serpentarius serpentarius orientalis** Verr. **Secretary Bird.**

Frequently seen on the plains round Nakuru.

222. **Serpentarius serpentarius gambiensis** Ogilby. **Northern Secretary Bird.**

This form probably occurs on the western plains of Uganda. It appears, however, doubtful whether the supposed races can really be upheld.

223. **Necrosyrtes monachus** Temm. **Common Brown Vulture.**

This is the commonest vulture in East Africa, and particularly plentiful in the Naivasha and Nairobi districts.

Nairobi and Kisumu.

224. **Neophron percnopterus** Linn. **Egyptian Vulture.**

Occasionally one or two would visit the slaughter-houses at Kisumu, but were invariably driven off by *N. monachus*.

225. **Lophogyps occipitalis** Burch. **White-necked Vulture.**

I shot a specimen of this bird in September 1918, on the open plains beyond Lake Narasha at 8,900 feet, on the Eldoret Road.

226. **Pseudogyps africanus** Salvad. **Lesser African Vulture.**

So much variation exists in the plumage of these birds that it appears doubtful if there are as many forms as have been described.

N. of Marieh Pass, Suk. ♂, 12.vi.1917.

227. **Polyboroides typicus** Smith. **Bare-faced Whistling Hawk.**

One bird is a dark specimen with the barring of the lower surface indistinct.

Nairobi and Kimiriri River, Elgon. 2 ♂ ad.

228. **Circus macrourus** Gm. **Grey Harrier.**

A common migrant ; most of the birds seen are in immature dress.

Dar-es-Salaam, Uasingishu, Kyambu, and Nairobi.

229. **Circus aeruginosus** Linn. **Marsh Harrier.**

Not so common as the above.

Nakuru Lake. ♀, 17.xii.1917.

230. **Circus ranivorus** Daud. **African Harrier.**

Not at all common in East Africa and Uganda.

Entebbe, Uganda. ♂, 19.xi.1917.

231. **Melierax canorus metabates** Heugl. **Northern Chanting Hawk.**

I have a very dark specimen, but the vermiculations on the secondaries are present. Some individuals of this form, however, have uniform wings.

Kerio River, Turkana, Uganda. ♂ ad., 6.vi.1917.

232. **Melierax poliopterus** Cab. **White-rumped Chanting Hawk.**

Dr. Hartert, in *Vögel Pal. Fauna*, places this bird as a subspecies of *M. canorus*, but to me it ought to be kept distinct because apparently *M. poliopterus* and *M. metabates* are found in the same countries. The young bird taken in February is exactly like that captured in March, and both belong to *M. poliopterus*. The general scheme of coloration is similar in young of *M. metabates* and *M. poliopterus*, but the latter is much darker, while the upper and under tail-coverts are marked differently, *M. poliopterus* having cordate markings.

Tsavo and Mt. Moroto, Turkana in Uganda.

233. **Melierax gabar** Daud. **White-rumped Sparrow Hawk.**

(*M. niger* is synonym.)

There is no doubt that *M. niger* is nothing but the melanistic form of *M. gabar*. Not only have I seen a black bird mated to a normally coloured one, but in the Nairobi Museum is a specimen which is parti-coloured. A common species. The young vary greatly, some having brown or blackish markings on the underside, others bright reddish brown. A male was shot in the act of removing young weavers from their nest.

Fort Hall and Kyambu, Nairobi, Burnt Forest, Kimiriri River near Elgon, Meuressi, Turkwell River in Uganda.

234. **Kaupifalco monogrammicus** Temm. **Lesser Chanting Hawk.**

Nairobi, Fort Hall, Kyambu, and Kimiriri River near Elgon.

235. **Astur melanoleucus** Daud. **Black and White Goshawk.**

Elgon. ♂ ad., 3.i.1916.

236. **Astur tachiro tachiro** Daud. **Barred Goshawk.**

A. t. acelatus Oberhols.

Oberholser has described a form of *Astur tachiro* from Taveta, which he named *A. t. acelatus* (*Proc. U.S. Mus.*, 1905). I fail to recognise this subspecies, especially as the type is the only known specimen. If valid, my bird would have to belong to this form.

Taveta, S.E. Kilimanjaro. ♀, 15.iii.1919.

237. **Astur tachiro nyanzae** Neum. **Uganda Barred Goshawk.**

Apparently intermediate between *A. tachiro tachiro* and *A. tachiro undulicventer*. The young birds shot in June and July are all about the same age and show no signs of assuming the adult plumage. Some are heavily spotted, others not.

Entebbe, Nairobi, Kyambu, Fort Hall.

238. **? Astur tachiro tenebrosus** Lönnb. **Black Goshawk.**

A ♀ agrees exactly with Lönnberg's description of his new subspecies. I doubt if it is a good form and consider it a melanistic variety of *Astur tachiro nyanzae* Neum.

Forest West Kenia, 6,000 feet. A. B. Percival coll.

239. **Accipiter badius sphenurus** Rüpp. **Pale-breasted Sparrow Hawk.**

Young birds, which are moulting into adult plumage, were shot January and March. One male is in almost complete breeding dress.

Tsavo, Lugalambo, and Turkwell River, Uganda.

240. **? Accipiter badius riggenbachi** Neum. **Rufous-breasted Sparrow Hawk.**

A bird with very distinct heavy rufous barring—not fine and pale as in all the specimens in the Tring Museum and thirty others. The only specimen with which it agrees is the female of *A. riggenbachi* from Senegal. Now, the strange thing is, that in order to accept a dark barred bird as distinct from the pale, in a country where both occur, Neumann had to make *A. riggenbachi* a species, not subspecies of *A. badius*! Since I also have taken a dark bird, where pale ones occur, it seems to me that *A. riggenbachi* is not a species nor even a distinct subspecies, but merely a dark form of *A. badius sphenurus* (type and cotypes examined). The fact that the type of *A. riggenbachi* has a uniform breast counts for nothing, as some *A. badius sphenurus* have also practically uniform breasts. Either *A. riggenbachi* is a good species, and it extends to east of Kilimanjaro, or else it is a synonym of *A. b. sphenurus*. Dr. Hartert takes this latter view.

1 ♀, 4.iii.1919. Taveta, S.E. Kilimanjaro.

241. **Accipiter minullus tropicalis** Rehw. **Little Sparrow Hawk.**

A female, although a breeding bird, has not yet completed her moult into adult plumage.

Fort Hall, Kyambu, Nairobi. ♂♀, March, September, December.

242. **Accipiter ovampensis** Gurney. **Barred Sparrow Hawk.**

The occurrence of this species in East Africa greatly extends its known range. My specimen is rather more distinctly and widely barred than birds from Gambaga, and is rather larger, having wings of 230, as compared to 220 mm.

Nairobi. 1 ♀, 9.iii.1917.

243. **Accipiter rufiventris** A. Sm. **Brown-breasted Sparrow Hawk.**

Not a common species. My female is rather dark.

Nairobi and Kijabe. ♂, 14.ix.1917; ♀, 20.v.1916.

244. **Circaetus cinereus** Vieill. **Brown Harrier Eagle.**

A single male was seen and procured at Mombasa, March 1917.

245. **Circaetus pectoralis** Smith. **White-breasted Harrier Eagle.**

A fully adult ♀ was shot at Nairobi, 27.iii.1917. Not common in British East Africa.

246. **Spizaetus coronatus** Daud. **Martial Hawk Eagle.**

Nairobi and Kabete. ♀, 5.ii.; juv. in moult, 25.iii.1917.

247. **Hieraaetus ayresi** Gurney. **Spotted Hawk Eagle.**

? *H. lucani* Sharpe & Bouv.

An adult ♂, Nairobi, 14.vii.1918. Lieut. Davies has written an interesting note in the *Ibis*, 1919, regarding this bird; but without examining the material on which he bases his remarks, one cannot form a personal opinion on the matter. I do not consider that my specimen has a long tail for its size.

248. **Hieraaetus wahlbergi** Sund. **Wahlberg's Brown Eagle.**

Two adult specimens in fresh plumage, March 1917, on the Kabua River, Rudolf.

249. **Lophoaetus occipitalis** Daud. **Crested Hawk Eagle.**

Nairobi River. ♀, 30.x.1916, in breeding condition, though not in full adult plumage.

250. **Aquila rapax rapax** Temm. **Tawny Eagle.**

Very common round Nairobi. It is a great carrion eater, feeding freely amongst kites, though keeping these at a respectful distance. It is also plentiful at Naivasha.

251. **Helotarsus ecaudatus** Daud. **Bateleur Eagle.**

Eldoret, Uasin Gishu.

252. **Buteo buteo vulpinus** Gloger. **Rufous Buzzard.**

(*B. desertorum, anceps, rufiventer !*)
Eldoret, and Yala River, Kavirondo.

253. **Buteo oreophilus** Hart. and Neum. **Mountain Buzzard.**

This Mountain Buzzard is not very common. An adult ♀ was shot off her nest, which contained two eggs, on Mt. Elgon, 7,000 feet, 27.iii.1916. The eggs are chalky white with pale indistinct blotches. My brother Noël shot a ♀ 6,000 feet high on Kilimanjaro, in August.

254. **Buteo augur** Rüpp. **Red-tailed Buzzard.**

♂, 2.v.1917; ♀, 30.xii.1916; both in the black plumage. The female is not jet black, but brown-black.
Nairobi and Elgon, 6,000 feet.

255. **Machaerhamphus anderssoni** Gurney. **Bat Hawk.**

A pair was seen every night for some time just at sunset, when the bats started to come out. Within an hour they had fed and disappeared. They catch and devour a bat in mid-air.
Kisumu, Nairobi.

256. **Butastur rufipennis** Sund. **Red-winged Hawk.**

1 ♂ 2 ♀, all in different phases of plumage. The presence of this species so far south as central Tanganyika Territory extends the distribution as given in Reichenow's *Vögel Afrikas*.
Singo in Uganda, Morogoro in Tanganyika Territory.

257. **Milvus migrans parasitus** Daud. **Southern Kite.**

Nairobi, Naivasha, and Mt. Moroto in Uganda.

258. **Milvus migrans migrans** Bodd. **European Black Kite.**

Numbers visit East Africa during the winter, but are merely birds of passage, not remaining longer than a week in any one place.

259. **Elanus coeruleus** Desf. **Black-winged Kite.**

Elgon and Sezibwa River in Uganda; Kyambu in East Africa. A nestling, 16.viii.1916.

260. **Pernis apivorus** Linn. **European Honey Buzzard.**

An April bird is in fresh full plumage, while autumn ones are much worn and have a paler appearance, especially about the head.
Yala River, Kavirondo, and Nairobi.

261. **Baza verreauxi** Laf. **Cuckoo Falcon.**

? *B. emini.*

My male has barred under wing-coverts, the female uniform. I doubt if *B. emini* is a valid species, as my series (ten specimens) does not support it.

Soronko River, Elgon, and Kadama Bukedi, in Uganda.

262. **Falco peregrinus minor** Schleg. **Lesser Peregrine Falcon.**

An adult in rather worn plumage, and a young bird.

Samburu, 8.xi., 23.vii.1918.

263. **Falco biarmicus abyssinicus** Neum. **Abyssinian Red-headed Falcon.**

The adult males no doubt belong to this form, while the two young birds may possibly belong to the typical *F. biarmicus biarmicus*, having been shot in German East Africa.

Turkwell River, Uganda; and Morogoro.

264. **Falco ruficollis** Swains. **Red-necked Falcon.**

The adult is a bird of the pale-breasted variety with few bars on the underside, while the young bird has no indication of a rufous neck-patch. Not common.

Turkana, Uganda. ♂ ad., 3.iii.; ♀ juv., 7.iii.1918.

265. **Falco subbuteo subbuteo** Linn. **European Hobby.**

Two specimens shot by Blayney Percival in the Northern Guaso N'yiro are interesting. One is a young in the first plumage, the other is an adult, but has only a trace of rufous on the thighs and under tail-coverts.

Jinga in Uganda, and Voi in East Africa.

266. **Falco cuvieri cuvieri** Smith. **Cuvier's Brown-breasted Hobby.**

The male has the tail uniform grey, the female barred on both webs. The latter is adult, showing no pale edges to the feathers of the mantle. In some adult specimens the breast is very pale rufous.

Elgon, Nairobi. ♂, 6.viii.1916; ♀, 30.vii.1919.

267. **Falco fasciinucha** Neum. **Taru Brown-breasted Falcon.**

♂ juv., 5.iii.1918, Voi Station. This species was previously only known from the type which was procured in the Teita Country. It is very like *F. cuvieri*, but more robust—the legs more powerful. This feature, along with the pale greyish rump, which is spotted and barred, and the barred grey tail with terminal white bars, distinguish this species at a glance from *F. cuvieri*. Except for its much stronger feet one might easily mistake the bird for a young *F. cuvieri*.

This specimen is now in the Tring Museum. It was exchanged by Colonel Meinertzhagen from Mr. Blayney Percival, who shot it at Voi Station.

268. **Falco tinnunculus tinnunculus** L. **Common Kestrel.**

7 ♂ and 5 ♀, collected in January, March, April, May, and September to December, belong to the European species. They are in various stages of plumage, from young of the year to fully mature adults in full plumage. The dates are of interest.

Masindi, Bukedi, in Uganda; Kisumu, Kakrur, Naivasha, Fort Hall, Kyambu, Tsavo, and Lake Jipe.

269. **Falco tinnunculus carlo** Hart. and Neum. **Brown Kestrel.**

♂, 11.v.1918. Fort Hall.

This bird, being very heavily marked and dark, probably belongs to this race.

270. **Falco rupicoloides arthuri** Gurney. **Lesser Barred Kestrel.**

A single specimen collected in Turkana, 17.iv.1918, belongs to this race. It is a rare bird. It was collected by the East Africa Natural History Society's collector, and is now in the Tring Museum.

Meuressi, Turkwell River, Uganda.

271. **Falco naumanni** Fleisch. **Lesser Kestrel.**

Kisumu and Kyambu.

272. **Poliohierax semitorquatus semitorquatus** Smith. **Red-backed Falconet.**

There are certainly two distinct forms of the African Falconet—the southern or typical, extending from South Africa to as far north as the Athi Plains (wings: ♂ 120–124, ♀ 125 mm.), and a northern race from Abyssinia to Baringo, which is paler and smaller.

Simba, Taveta, and Tsavo.

273. **Poliohierax semitorquatus homopterus** Oberhols. **Northern Falconet.**

A ♂, shot 1.vi., and a ♀, 3.vi.1917, belong to the pale race, the oldest name for which appears to be *P. homopterus*. Wings: ♂ 110–115, ♀ 120 mm.

Turkwell and Kobua Rivers, Lake Rudolf.

274. **Bubo lacteus** Temm. **Milky Eagle Owl.**

Jinja in Uganda, Lake Naivasha.

275. **Bubo capensis capensis** Daud. **Cape Eagle Owl.**

I cannot see any difference between my East African bird and specimens from Natal or Transvaal. It is fairly common in parts of Tanganyika Territory.

Surely Oberholser re-described *B. capensis* when he named the Natal bird *B. m. amerimus* (not *americanus*, as stated by C. Grant, *Ibis*, 1915).

Lake Jipe.

276. **Bubo africanus africanus** Temm. **Lesser Grey Eagle Owl.**

B. maculosus auct.
Nairobi and Nakuru.

277. **Bubo africanus cinerascens** Guér. **Brownish Eagle Owl.**

Apparently this northern bird extends into the Suk Country and Nile province of Uganda.
Kerio River and S. Turkana. ♂, 10.viii.1916.

278. **Asio capensis capensis** A. Sm. **Tawny Grass Owl.**

Found in the swamps and grass country.
Lakes Nakuru and Naivasha.

279. **Otus leucotis** Temm. **White-faced Scops Owl.**

Owing to insufficient material I cannot be quite sure as to whether these are typical *O. leucotis leucotis* (Senegal), or whether they belong to the Somali form which has been named *O. l. nigrovertex* by Erlanger.
C. Grant placed his Moroto birds as *O. l. leucotis* (vide *Ibis*, 1915).
Meuressi, Turkwell and Moroto, Turkana, Uganda.

280. **Otus scops ugandae** Neum. **Uganda Little Owl.**

Budongo Forest, Soronko River, and Buremezi, Uganda.

281. **Syrnium woodfordi** subsp. **Brown Forest Owl.**

In my series of twelve specimens there is every gradation from a bright golden brown to deep black brown. Thus my specimens can be matched with birds in the Tring Museum which have been placed as *S. w. nuchale, bohndorffi, suahelicum*, and *nigricantius*.
The golden brown bird has no signs of vermiculations on the feathers of the back.
The young also differ: one is greyish buff, while the other two are sandy buff. Then, again, there is a young bird which has assumed adult plumage, but there still remain some downy feathers and down about its neck at the back and on the thighs. This bird is very dark brown. Two birds moulting from nestling plumage into second dress exhibit interesting differences, one having large broad spear-shaped spots on the crown, the other small white irregular bars. The series in Tring appears to indicate three distinct birds in Africa: (1) *S. woodfordi woodfordi*, South Africa; (2) *S. woodfordi suahelicum*, ashy brown, vermiculated on the back, with narrow barred feathers on the underside; and (3) a dark chestnut brown race found in Gabun and Angola.
These birds are very fond of insects, beetles, and moths.
Budongo Forest, Lake Albert, Kyetume, Lugalambo, and Elgon in Uganda; Aberdare Mountains, Kyambu, and Nairobi in East Africa.

282. **Glaucidium perlatum** subsp. **Pearl-spotted Owl.**

The Tring Museum possesses a fine series of this bird, and when these are laid out according to localities, it is apparent that there are certainly two if not three distinct forms. The typical birds (Senegal) are generally more rufous above and below, while the eastern birds are more greyish on the mantle; variation in the amount of spotting occurs in both forms, but the general tone is quite marked.

East African specimens are intermediate.

My specimens show extremes: birds with uniform heads and backs—another with uniform head and spotted back, others spotted on head and back, and one barred on the head and spotted on the mantle!

Tsavo, Kitui, Simba in East Africa; Kerio and Kimiriri Rivers, Elgon, and S. Ankole in Uganda.

283. **Tyto capensis** A. Sm. **Black-backed Barn Owl.**

A ♂ is uniform black-brown on the back and less heavily spotted on the underside than Cape birds. It is possible that with more material it will be shown that the northern birds belong to a recognisable race.

♂, Fort Hall, 13.viii.1916.

284. **Tyto alba affinis** Blyth. **Cape Barn Owl.**

T. maculata auct.

Kyambu and Nairobi. Nestlings, 2.ix.1917.

285. **Psittacus erythacus** Linn. **Grey Parrot.**

A male shot in December appears to be an old bird. It has an extra large bill, and is considerably darker than two others. The tips of all the feathers of the breast, abdomen, and rump are shot with bluish purple. The sexes differ greatly in size.

Nyarondo in N. Kavirondo; Jinja and Budongo Forest in Uganda.

286. **Poicephalus gulielmi massaicus** Fisch and Rchw. **Red-fronted Green Parrot.**

Young birds are bright green like females, but have dark, horny grey-brown bills. This is a very noisy species, and is very partial to the Juniper Forest of the higher altitudes.

Burnt Forest, Elgeyu Forest, Aberdare Mountains.

287. **Poicephalus fuscicapillus** Des Murs. **Golden-breasted Parrot.**

My collectors tell me that these birds do considerable damage to young growing coconuts, but personally I have not witnessed this destruction. The birds are certainly seen among the palms, but mostly on the highest fronds.

Changamwe.

288. **Poicephalus rufiventris simplex** Rchw. **Salmon-bellied Parrot.**

It has been shown that the birds from south of Abyssinia are separable from the northern or typical, and the name "*Simplex*," which Reichenow applied to a female bird collected in Tanganyika Territory, has rightly been re-established.

With my series and the birds in Tring Museum it is obvious that there are three, perhaps four distinct forms :—

P. rufiventris rufiventris, Abyssinia and Blue Nile.—Dark above, rump greenish yellow tinged blue. Bill small.

P. rufiventris ? subsp. (intermediate), South Ethiopia.—Not so dark above, bill small, rump bluer. Wings, 140–155 mm.

P. rufiventris pallidus, subsp. nov., North Somaliland.—Much paler, bill small, rump brighter blue, sides of abdomen blue. Wings, 145–155 mm.

P. rufiventris simplex, Tanganyika Territory, Kenya Colony.—Larger, darker than N. Somaliland birds, much heavier beaks, rump green, tinged with blue. Wings, 150–163 mm.

I have *P. ruf. simplex* from Tsavo, Taveta, Maungu, Masongoleni, Simba, Kitui, and River N'zin in Ukamba. 13 ♂ ♀.

289. **Poicephalus meyeri matschiei** Neum. **East African Blue-rumped Parrot.**

This form occurs in the southern portion of the Seyedi Province, and is said to occur in Mombasa area.

Kongwa, Tanganyika Territory. ♂, 26.iv.1917, collected by Loveridge.

290. **Poicephalus meyeri** subsp. nov. ? **Kenia Yellow-shouldered Parrot.**

A ♂ shot on Kenia, 7,000 feet, in February, comes from a locality where specimens of *P. meyeri* do not appear to have been collected. It is an extremely dark bird—darker than *P. m. saturatus* or *P. m. neavei*. It has dark yellow shoulders and a yellow band on the crown. The rump is yellow green, bluer at base.

291. **Poicephalus meyeri saturatus** Sharpe. **Uganda Yellow-shouldered Parrot.**

P. m. nyansae Neum.

In 1916, when reporting on a collection from Uganda, I admitted three forms of *P. meyeri* to Uganda and East Africa. I did this because at the time I had insufficient material to test the validity of the several races named. With additional material I am compelled to unite *P. m. nyansae* of Neumann with *P. m. saturatus* of Sharpe.

Masindi and Mubendi in Uganda.

292. **Poicephalus meyeri virescens** Rchw. **East African Yellow-shouldered Parrot.**

I am not satisfied that the East African birds are the same as Uganda ones—they are not so dark, more greenish (not the greenish tinge of immaturity). The rump is rather bluer than in West Uganda birds. Should more material show the East African birds to be the same as Uganda specimens, then *P. m. virescens* becomes a synonym of *P. m. saturatus*.

Soronko River, Nyarondo in Kakamega, and Fort Ternan.

293. **Agapornis pullarius pullarius** Linn. **Red-faced Love-bird.**

294. **A. p. ugandae** Neum.

In the Tring Museum seven western birds have dark blue rumps, much darker than birds from South Abyssinia; two males from Masindi in Uganda are also dark. East African and Uganda (Central and East) birds cannot be separated from Ethiopian specimens. The Masindi birds must be called *A. pullarius* and the rest *A. p. ugandae*.

Masindi, Lugalambo, Entebbe, Jinja in Uganda, and Nyarondo in E. Africa.

295. **Agapornis personatus** Rchw. **Yellow-breasted Love-bird.**

This species comes over to the east of Mt. Kilimanjaro, where it was seen by me at Taveta.

Kongwa, Tanganyika Territory. ♂, 2.iv.1917, collected by Loveridge.

296. **Palaeornis krameri** Scop. **Long-tailed Ring-necked Parrot.**

Palaeornis docilis auct.

A pair were seen between Masindi and the Budongo Forest.

297. **Corythaeola cristata yalensis** Mearns. **Eastern Giant Plantain Eater.**

In order to test the validity of this subspecies I procured 5 ♂ and 1 ♀ from the type locality. Comparing these with Gabun and other West African birds (Sierra Leone excepted), they certainly show less blue and a more greenish tinge on the upper surface. They are also paler about the cheeks and throat. The Sierra Leone birds are coloured similarly to the Eastern ones, but are smaller. The Eastern birds are the largest; the difference, however, can only be appreciated with a series.

Mabira and Kyetume in Uganda, Yala River and Kakamega in East Africa.

298. **Musophaga rossae** Gould. **Ross's Red-crested Plantain Eater.**

I have compared Uganda and Western birds and can find no difference. Some Uganda specimens are certainly bluer, but these are newly feathered birds; others which are purplish show new feathers coming in, which are blue. The coloration of the tail feathers varies with age and exposure. I have, however, noticed that North Kavirondo and Nandi birds have less greenish tinge to the feathers of the underside.

East Elgon and Kakamega.

299. **Turacus hartlaubi** Fisch. and Rchw. **Hartlaub's Blue-crested Plantain Eater.**

Mearns has separated this bird into several subspecies. He gives as the distribution for the typical bird, Kilimanjaro, South-east Africa north to Sotik Forests, for "*T. l. medius*" Machakos north of the Uganda Railway, Kenia to Uganda.

This distribution appears to me peculiar, particularly the northern limits of each supposed race. The Sotik Forest is continuous with the Mau Forest which crosses the railway and merges into the forest of the Ravine and Elgeyu Escarp-

ment. Now, according to Mearns at the Sotik end of the Forest is to be found the typical bird and at the Elgeyu end the subspecies *medius*.—With birds before me from Kilimanjaro (type locality of *T. hartlaubi hartlaubi*) north to Elgon, it appears that the typical bird extends to Mau, Ravine, Elgeyu, and Elgon ; while in the Machakos, Kenia, Nairobi, and Escarpment districts there may possibly be a recognisable subspecies which would have to bear the name of *T. h. medius*.

T. h. crissalis from Mt. M'bololo cannot be upheld ; the coloration of the abdomen and vent varies greatly in birds from one locality.

300. *T. h. coeruleus* from Mt. Uraguess may possibly be separable, because the avifauna from that district is most remarkable.

301. *T. hartlaubi medius* examined from Machakos, Kyambu, Nairobi, Escarpment.

Turacus hartlaubi hartlaubi from Molo, Elgeyu, Burnt Forest, Elgon.

302. **Turacus leucolophus** Hartl. **White-headed Plantain Eater.**

Plentiful in suitable localities.

Bugoma, Budongo, Elgon, Buremezi in Uganda ; Marich, Suk, Kitosh, and Nyarondo in East Africa.

303. **Turacus emini** Rchw. **Emin's Green Plantain Eater.**

T. ugandae Rchw.

It seems to me impossible that there should be two distinct species of green Plantain Eaters in the Lake Albert district. My birds (6 ♂ 3 ♀) are all identical, and they were collected from West to East Uganda and in North Kavirondo. There is a certain amount of variation, but this is due to weathering of the plumage. One specimen shot in Kavirondo has a red feather in its tail.

Budongo Forest, Bugoma Forest, Lugalambo, Mabira in Uganda, South Elgon, and Kakamega.

304. **Gymnoschizorhis personatus centralis** Neum. **Uganda Pink-breasted Plantain Eater.**

My series (3 ♂ 2 ♀) rather supports Neumann's statement that the Uganda birds are darker than the Tanganyika Territory birds, and for the present I shall recognise his subspecies. If these birds are not separable, then my specimens would be *G. p. leopoldi* Shell.

Kendu Bay, Kano, and Kibos.

305. **Chizaerhis africana zonura** Rüpp. **Hackle-neck Plantain Eater.**

Young birds in first plumage (14.iii.1916) are more uniform grey-brown, lacking the striping on the breast and the elongated neck feathers.

Jinja, Masindi, and Elgon in Uganda.

306. **Corythaixoides (Chizaerhis) leucogaster** Rüpp. **White-bellied Plantain Eater.**

Females have greenish bills. My specimens are rather smaller than northern ones (Abyssinia), having wings of 205–220, as against 215–230 mm. ; otherwise there appears to be no difference.

Kacheliba, Suk, Simba, M'buyuni, and Tsavo. 3 ♂ 2 ♀.

307. **Centropus monachus monachus** Rüpp. **Great Blue-headed Coucal.**

The distribution in North Kenya Colony appears to be east of the Elgeyu Escarpment. West of this range is found the smaller race. The hen sits after laying the first egg, thus eggs do not hatch at the same time.

Fort Hall and Kyambu.

308. **Centropus monachus fischeri** Rchw. **Fischer's Dark-headed Coucal.**

Fort Ternan in East Africa, Kewala in Uganda.

309. **Centropus senegalensis flecki** Rchw.

Eight specimens, Lumbo (Nairobi Museum Coll.).

I have reason to believe that this species occurs in the south of the Seyedi Province. A bird of the "*senegalensis*" type is reported from Zanzibar (Kirk).

310. **Centropus superciliosus intermedius** subsp. nov. van Someren. **East African Hackle-necked Coucal.**

These are all adult birds. I obtained a large series of this bird, because I was certain that with sufficient material one would be able to recognise a distinct race. I am satisfied that in point of size as well as colour, these birds can be separated from the northern typical bird from S. Arabia. Colour alone (much darker above than *C. superciliosus superciliosus*) justifies this. The extreme form from Angola has been separated by C. Grant as *C. s. loandae*. This is a larger bird than the intermediate race. The East African and Uganda specimens have wings of 140–155 mm. The specimen of this Coucal from Sokotra in the Tring Museum does not agree with the characters as given by C. Grant for *C. s. sokotrae*!

Mombasa, Changamwe, Lamu, Tsavo, Samburu, Nairobi, Kisumu, also Jinja in Uganda. Type ♂, Mombasa, 12.iv.1919.

311. **Centropus grilli** Hartl. **Red-winged Black Coucal.**

♂, 11.v.1917.

Kitosh district.

312. **Ceuthmochares aereus** ? subsp. nov. **Green Yellow-billed Coucal.**

Specimens from the coast of British to Portuguese East Africa are much paler than South African examples, and may possibly belong to a distinct form. Doherty procured this bird at Escarpment, Lowe in Uganda (Naikwa Hills).

Changamwe, near Mombasa.

313. **Ceuthmochares aereus intermedius** Sharpe. **Grey Yellow-billed Coucal.**

The distribution in East Africa and Uganda of this race and the above requires careful study. I have seen specimens of this form from Kenia, and myself have collected it in Mubendi, Budongo, Bugoma, Mubango, Lugalambo, Kyetume in Uganda, Elgon, Fort Ternan in East Africa. If they occur together, they cannot both be races of the same form. 6 ♂ 9 ♀, nestling, 20.xi.

314. **Coccystes cafer** Licht. **Green-backed Crested Cuckoo.**

In a Kyambu specimen the striping of the breast reaches to the abdomen, giving the bird a dark appearance.

Jinja in Uganda and Kyambu in East Africa.

315. **Coccystes jacobinus** Bodd. **Blue-backed Crested Cuckoo.**

Lamu, Manda, Tsavo, and Kisumu. 3 ♂ 2 ♀.

316. **Coccystes glandarius** Linn. **Great Spotted Cuckoo.**

December birds were very fat, pointing rather to the fact that they were migrants from the north. May birds were in breeding condition, while the young shot 9.v.1917 still has a soft bill. These lay regularly in East Africa, so I do not think that Selater is correct when he suggests that South African birds come up to Uganda after the breeding season (during South African winter), nor do I believe in the theory of double breeding of European birds! (C. Grant, *Ibis*, 1915, p. 416). There is doubtless a resident bird in East Africa, but whether or not it is the same as the European bird remains to be proved.

Kano, Jinja, and Suk Hills.

317. **Cuculus canorus canorus** Linn. **European Cuckoo.**

♂, Nairobi, 28.i.1918. This bird has a small black bill and is probably a migrant from Europe.

318. **Cuculus canorus gularis** Steph. **Yellow-billed Grey Cuckoo.**

Larger than *C. canorus canorus*, and base of the upper mandible and almost the whole of the lower cadmium-yellow.

Kimiriri River, Elgon, and Gomba in Uganda.

319. **Cuculus clamosus clamosus** Lath. **Black Cuckoo.**

See notes under next species.

Kitui in Ukamba, 20.x.1918.

320. **Cuculus jacksoni** Sharpe. **Jackson's Black Cuckoo.**

I have examined a large series of this bird and of the preceding, and from the specimens one is led to suggest that *C. jacksoni* is a species occurring side by side with *C. clamosus*, or that *C. jacksoni* is a subspecies of *C. clamosus* and limited to Uganda, where the adult gets a red throat.

The young in intermediate plumage would appear to be indistinguishable, yet the adults are! Black birds such as one gets in Natal occur in Uganda, S. Ethiopia, and East Africa (Doherty coll. Escarpment). Bannerman is working at these Cuckoos, so I will not discuss them further.*

Namasagali, Elgon, Soronko, and Mubendi in Uganda.

* Bannerman's notes have since appeared in *Ibis*, 1921, pp. 93–5.—E. H.

321. **Cuculus gabonensis mabirae** van Someren. **Mabira Red-throated Cuckoo.**

Bull. B.O. Club, 1915.

This is another bird which apparently occurs side by side with *C. jacksoni*. I omitted to state in *Ibis*, 1916, that, besides having rusty-buff cheeks, the pre-orbital spots are buff and the crown of the head is tinged greyish, not blue-black as in *C. gabonensis* or *C. jacksoni*.

The young in second plumage are somewhat like young of *C. solitarius*, but differ in having the back blue-black, not grey. They differ from young of *C. jacksoni* in the tails, which are barred, not uniform or with white shaft spots as in *C. jacksoni*. The nesting plumage is not known.

Bugoma, Budongo, in Uganda.

322. **Cuculus solitarius** Steph. **Red-throated Grey-backed Cuckoo.**

The young of this bird and *C. jacksoni* or *C. clamosus* are quite different, and cannot possibly be confused.

Mubendi, Entebbe, Kyetume and Kobua, Rudolf; Mawakota and Bumasolo in Uganda; Kyambu, Nairobi, and Nyarondo in East Africa. February, March, May, October; young in May and July; thirteen specimens.

323. **Cercococcyx mechowi wellsi** Bannerman. **Long-tailed Barred Cuckoo.**

Bull. B.O. Club, November 1919.

This bird does not appear to extend to Elgon district, its eastern limits, so far as is known, being west of Jinja. What is the relationship to *C. olivinus* of Sassi? (Cf. *Ibis*, 1921, p. 96.)

Kyetume, Uganda.

324. **Chrysococcyx auratus auratus** Gm. **Yellow-bellied Emerald Cuckoo.**

C. cupreus Shaw.

C. smaragdineus (authors).

Both Bannerman and Grant agree that there are two distinct species, one with white, barred, and one with uniform yellow under tail-coverts, which in the case of young birds are barred, but not as in the first.

My series along with the specimens in Tring show that birds which are resident and breeding in British East Africa possess these characters. Thus if Bannerman and Grant were correct, we should have a species and a subspecies inhabiting and breeding in the same districts! Bannerman next goes on to show that the South African bird always has white, barred, but never yellow, under tail-coverts, and states that this is a bird breeding in the south and migrating north during the southern winter. This is accepted by C. Grant. I have, however, stated that this type of bird breeds in Uganda and East Africa. The two forms are named *C. auratus auratus* Gm. (= *C. smaragdineus* and *C. cupreus* Shaw), type locality Gambia, and *C. auratus intermedius* Hartl., type locality Gaboon. In the Tring Museum there is a large series of Gaboon specimens—some with *barred white, some with uniform under tail-coverts*. The type of *C. intermedius* was *not* a South African bird! thus *C. intermedius* Hartl. is a synonym of *C. auratus*. The South African birds differ from northern specimens in the way Bannerman mentioned

on p. 245 of *Ibis*, 1912, *i.e.* they are smaller, they have white under tail-coverts which are barred, and the tail is shorter and not so graduated as in *C. auratus*. The South African birds, then, require a name. On investigation we find the name "*splendidus*" Gray. *Vide* Gray, *G.B.*, 1847. This was based on a *West-coast bird*. It was next used by Sharpe in his *Catalogue*, 1871, the reference he gives being Gray, 1847, mentioned above; but he states the locality as South Africa, which is wrong, Gray's "*splendidus*" being a West-coast bird, thus the name cannot be used. I name the South African bird—

Chrysococcyx auratus sharpei subsp. nov. (type in the Tring Museum).

Besides the differences mentioned by Bannerman as referring to males, we find the female of the southern bird differs from the northern bird in being more finely barred on the underside and lacks the clear green barring.

C. a. sharpei : Mawakota, West Elgon, and Soronko River, in Uganda.

C. a. auratus : Nairobi, Kyambu, and Kisumu in British East Africa.

325. **Chrysococcyx klassi** Steph. **White-breasted Emerald Cuckoo.**

In June 1919 I was surprised to find a young Klass's Cuckoo being fed by a pair of *Otyphantes reichenowi* and apparently thriving. How did the Cuckoo deposit its egg in the Weaver's nest ? My previous experience has been that this Cuckoo victimises "insect-eating" birds, not one given largely to a grain and seed diet.

South Ankole, Elgon, and Entebbe in Uganda; Kisumu, Nairobi, Kyambu, M'buyuni, Sagala, and Maungu in East Africa. Sixteen specimens.

326. **Chrysococcyx caprius** Bodd. **White-breasted Golden Cuckoo.**

C. cupreus auct.

Very common and very noisy. I witnessed the presence of seven adult birds in a small patch of scrub not more than a quarter of an acre in extent.

Bugoma, Kyetume, Nmbango, Junja, Soronko, Elgon, in Uganda; Kisumu, Kendu Bay, Kibos, Nairobi, and Tsavo in East Africa.

327. **Indicator indicator** Gmel. **Black-throated Honey Guide.**

Nmbendi and Elgon in Uganda; Nakuru, Fort Hall, and Tsavo in East Africa.

328. **Indicator variegatus variegatus** Linn. **Speckled Honey Guide.**

Some of these birds are heavily speckled on the breast, some have almost uniform undersides.

Mubendi, Budongo, and Moroto in Uganda; Burnt Forest, Naivasha, and Nairobi in East Africa.

329. **Indicator minor teitensis** Neum. **Lesser Honey Guide.**

(i) 3 ♂ 4 ♀: Heads green; green backs; underside grey-olive, green tinged. Wings: ♂ 86–91, ♀ 83–85 mm.

Changamwe, Taveta, Kitui, Kyambu.

(ii) 9 ♂ 1 ♀: Heads green; green backs; underside grey-olive, green tinged. Wings: ♂ 91–98, ♀ 83–89 mm.

Fort Ternan, Aberdares, Kakamegoes, Kobua, Rudolf, and Mt. Moroto, Uganda.

(iii) 1 ♂ 3 ♀: Heads brown-grey, as in *diademata*; backs more golden; underside paler less tinged olive. Wings: ♂ 86, ♀ 83–85 mm.

Kobua River and Mt. Moroto.

This is a most interesting series which has caused me much bother. As *teitensis* and *minor* are supposed to be separable on size only, it would appear that no great reliance can be placed on this character.

A series of typical *minor* gives the following wing-measurements: ♂ 92–94, ♀ 88–89 mm.; South Abyssinian birds, ♂ 93–97, ♀ 87 mm.; North Abyssinia–Erithrea, ♂ 90, ♀ 85 mm.

Indicator lovati Og.-Grant agrees with these Erithrean birds, while the South Abyssinian birds are indistinguishable from those from the Aberdare Mountains.

330. **Indicator exilis ? pygmaeus** Rchw. **Uganda Little Olive Honey Guide.**

♂, 2.ii.1919; ♀, 7.v.1914, 4.viii.17.

My two new specimens agree with the bird collected in 1914, and are not typical *exilis* but nearer to *pygmaeus*. More material will probably show this to be a good race. These birds are clearly striped on the back.

Lugalambo, and Mabira Forests in Uganda.

331. **Indicator exilis ? narokensis** Jacks. **Little Grey-bellied Honey Guide.**

(? *I. ansorgei* Alex. ?)

1 ♂ 2 ♀ agree with the descriptions of *ansorgei* and *narokensis*. They are pale greyish below and have the mantle greyish green with practically no stripes.

Mt. Moroto, and Soronko River, Elgon, Uganda.

332. **Prodotiscus regulus** Sund. **Slender-billed Brown Honey Guide.**

♂, 30.vi.1918; ♀, 27.vii.1918, 21.xi.1916.

These birds agree very well with South African birds. They have wings of 73–75 mm.

Nairobi, Campi-ya-bibi, Samburu, in the Scrub country.

333. **Prodotiscus insignis ? reichenowi** Mad. **Slender-billed Grey-bellied Olive-backed Honey Guide.**

5 ♂ 2 ♀. The identification of these birds must remain uncertain until the type of *reichenowi* can be examined. They are quite distinct from *emini*. More of a forest-loving bird than the preceding.

Nairobi and Kyambu.

334. **Prodotiscus insignis emini** Shell. **Uganda Slender-billed Olive Honey Guide.**

♂, 15.x.1915; ♀, 9.ii.1917. This very marked form appears to be confined to Uganda, the distribution being from the Nile district to Mt. Elgon and North Kavirondo. It is very rare.

Kakamegoes and Yala River.

335. **Lybius bidentatus aequatorialis** Shell. **Uganda White-flanked Red Barbet.**

This is an excellent subspecies which apparently extends to the Nandi country. Neumann's subspecies *L. b. aethiops*, Omo River and South Abyssinia, is on the whole smaller, but quite a number of the Uganda birds are as small, while the size of the South Ethiopian birds is constantly the same.

South-east Elgon, Kibras, Kibos, and Fort Ternan in East Africa ; Budongo, Bugoma, Kiwala, Kasaka, Kigoma, South Ankole, Masaka, and Entebbe in Uganda.

336. **Lybius melanopterus** Pet. **White-bellied Red-headed Barbet.**

A bird of the low altitudes and desert country. Young birds resemble the adults somewhat, but the red on the throat and crown is more restricted, and the spotting on the nape and mantle absent. The brownish area of the breast and in the scapular region is absent, and the white of the underside tinged yellowish. The bill, which is horn-brown, has smooth cutting edges.

Changamwe, Lake Jipe, Taveta, Teita, and Sagala Hills.

337. **Lybius leucocephalus** De Fil. **White-headed Barbet.**

Claude Grant, when referring to this bird, *Ibis*, 1915, endorsed the view of Reichenow, *Vög. Afrikas*, vol. ii, that *L. albicauda* of Shelley and *L. abbotti* Reichw. are merely stages in the plumage of *L. senex* Reichenow, the last named being the full adult. He further goes on to state that a larger series will show that *L. leucocephalus* is *L. senex* in its first dress, and as *L. leucocephalus* is the oldest name it would have to be adopted for the species. Now, my series of *L. leucocephalus* and *L. senex* prove quite conclusively that Reichenow and Grant are in error. *Lybius leucocephalus* is quite distinct from either *L. albicauda* or *L. senex*, as evidenced by the young bird of *L. leucocephalus* in my series, which to all intents is coloured similarly to the adults.

A point I wish to draw attention to is, that the extent of the white area on the breast varies in individuals—some have the white feathering extending in a point, well on to the abdomen ; in others, it is limited to the breast. The amount of white spotting on the wings differs in individuals. The distribution of this species is from the Ituri Forest and East Congo through Uganda, including the Blue and White Nile to Kavirondo. My series includes birds from Toro, Masindi, Jinja, S. Ankole, Kigezi, in Uganda ; Kitosh and Nyarondo in East Africa.

338. **Lybius albicauda senex** Rchw. 1887. **Black-winged White Barbet.**

Here, again, we are dealing with a quite distinct bird—*vide* remarks preceding species. It is undoubtedly related to *L. albicauda*, as evidenced by the indications of dusky mottling on the abdomen and flanks of individual birds, but otherwise it is quite distinct. Three young birds shot with their parents show quite clearly that this bird has nothing to do with *L. leucocephalus*. The young are coloured like adults, with the exception of the tail, which is suffused with black on the outer edges of the webs. The amount of white spotting on the back and wings varies individually—thus some old males have the white limited to the scapulars, others have the lesser coverts and mantle spotted.

I took the eggs in June 1919. The distribution appears to be East Africa from Ukamba north to Lumbwa.

I have procured it in the following places: Kitui, Ukamba, Fort Hall, and Nairobi.

339. **Lybius albicauda albicauda** Shell. 1881. **Black-billed White Barbet.**

Differs from the preceding subspecies in having the lower breast and abdomen in both adult and young blackish, the feathers having pale whitish tips. The wing-coverts are more spotted with white. It has been obtained at Taveta and Mombasa in British East Africa.

The distribution is: southern portion of Kenya Colony through Tanganyika Territory to the south-west shores of Lake Victoria.

(**L. leucogaster** Bocage 1887. **Black-tailed White Barbet.**

Differs from *L. albicauda senex* in having a black tail and white under wing-coverts.

Angola.)

340. **Lybius tridactylus ugandae** Berger. **Uganda Red-headed Black Barbet.**

I am perfectly satisfied that this is a good subspecies of *L. tridactylus*. Besides having the white and yellow edgings to the wing feathers narrower and less conspicuous, the wings are smaller. Thus a series of ten skins from Uganda varies from 75 to 85 mm. as against 85 to 93 (most 90 mm.) in *L. t. tridactylus* (Abyssinia). I thus do not agree with C. Grant, *Ibis*, 1915, p. 438, nor Sclater, *Ibis*, 1919.

Toro, Soroti, and Jinja in Uganda.

341. **Lybius torquatus irroratus** Cab. **Red-headed Yellow-bellied Barbet.**

Two females have the vents decidedly orange. There is a tendency in the East African specimens to show a greater expanse of black on the breast than in specimens from Tanganyika Territory.

Mombasa, Changamwe, Samburu.

342. **Tricholaema hirsutum ansorgei** Shell. **Ansorge's Green-breasted Barbet.**

Masaka, Kigezi, Mubango, Mibira, and Lugalambo in Uganda.

343. **Tricholaema melanocephala stigmatothorax** Cab. **Brown-throated Barbet.**

In the thorn bush and scrub of the Taru Desert this bird is plentiful, breeding in March and April. Young birds have the same colour scheme as adults, but the coloration is duller.

Tsavo, Bura, M'buyuni, Cami-ya-bibi, and Maungu.

344. **Tricholaema lacrymosa lacrymosa** Cab. **Spotted-flanked Barbet.**

345. **Tricholaema lacrymosa radcliffei** Og.-Grant. **Radcliffe's Spotted-flanked Barbet.**

T. l. ruehae Neum.

It is of interest that with my series of sixteen *T. l. lacrymosa* and five *radcliffei*, together with that of the Tring Museum, evidence goes to show that

Grant's subspecies can be upheld, provided the distribution is carefully noted. Birds with pear-shaped spots, *T. l. lacrymosa*, must be recognised as the eastern form—ranging through East Africa to North Kavirondo, to the eastern province of Uganda and into South Ethiopia, while the western form ranges through North Tanganyika Territory to Lake Victoria, extending to South Kavirondo on the east, on the west through Uganda to, but not including, the eastern province.

T. l. lacrymosa : Changamwe, Masongoleni, Taveta, Tsavo, Teita, Kitui, Lake Jipe, East Elgon, Sio River, Jinja, Mt. Moroto.

T. l. radcliffei : Fort Ternan, Kisumu, Kampala, Entebbe, Kabulamuliro, Toro, Kagera, and Nimule.

346. **Tricholaema diadematа diadematа** Heugl. **Buff-bellied Barbet.**

A series of birds from the White Nile and South Ethiopia have wings of 70–77 mm., while birds from North-east Uganda south to Mt. Kenia, although having the characteristic uniform belly, are considerably larger and have the same measurements as *T. diadematа massaica*.

Kyetume—Masindi, Uganda.

347. **Tricholaema diadematа** ? subsp. nov. **Large Buff-bellied Barbet.**

3 ♂ and 2 ♀ have wings of 80, 80, 81, 82, 85 mm., and were obtained at Mt. Moroto, Kacheliba, Kerio, and Mt. Kenia. 7,000 feet.

The specimen recorded by C. Grant (*Ibis*, 1915, p. 441) from the Turkwell River has wings of 82 mm. and would belong to this apparently larger race.

348. **Tricholaema diadematа massaica** Rchw. **Massai Buff-bellied Barbet.**

This subspecies is much larger than typical *T. diadematа*, and heavily spotted on the underside in both adult and young. Some birds, however, are not so heavily spotted as others. Wings, 77–85 mm.

Kisumu, Nakuru, Nairobi, Naivasha, Kendu Bay, Simba, and Tsavo in East Africa.

349. **Gymnobucco bonapartei cinereiceps** Sharpe. **Elgon Tufted Barbet.**

These birds, which are typical *G. b. cinereiceps*, have long straw-coloured tufts and distinctly greyish heads and necks. The ear-coverts are greyish. They have wings of 96–104 mm., and range from Elgon south to Nandi and possibly Sotik. They are the extreme contrast to *G. b. bonapartei* Hartl.

Elgon, Kakamega, Kitosh, Nyarondo, and Nandi.

350. **Gymnobucco bonapartei intermedius** subsp. nov.

The Tufted Barbet which occurs in Uganda is separable from the bird of Elgon and North Kavirondo in being smaller and in having the nasal tufts shorter, and chestnut or brownish in colour, and in having the ear-coverts brown. Bill smaller. Tail more washed with green, and mantle and wings more striped. It is thus the connecting link between *G. bonapartei* and *G. bonapartei cinereiceps*. Young birds have short, soft, pale straw-coloured tufts, not like Elgon birds. Wings, 87–99 mm.

Mabira Forest, west to the Mpanga and Ruwenzori and South Ankole. Type ♂: Mpanga Forest. 20.ix.1916.

Ogilvie-Grant noticed that the bird obtained during the Ruwenzori Expedition differed from the eastern form, but considered the difference due to wearing.

Namwave, Mubaugo, Mabira, Kyetume, Bugoma, Kigezi in South Ankole.

351. **Bucconodon olivaceum** Shell. **Large Olive Barbet.**

This species, the type of which came from Rabai, appears to be rare, very few specimens having been collected.

352. **Bucconodon leucotis kilimensis** Shell. **Black-headed Barbet.**

This is quite a good subspecies, but occasionally one comes across a bird from Tanganyika Territory which has a blackish rump, as in Natal birds. Young birds are rather blacker than adults, lacking the brown on the sides of the breast and in the scapular region ; the bristle-like feathers are restricted to the forehead. The bases of the upper and lower mandibles are pinkish or whitish.

Taveta, Lake Jipe, Teita.

353. **Barbatula duchaillui** Cass. **Yellow-spotted Barbet.**

B. ugandae Rchw.

With the additional material of 4 ♂ 4 ♀ to my series of 1914 (11 skins), I am unable to recognise Reichenow's subspecies. The spotting on the back is extremely variable. Wings, 75–80 mm.

S. Ankole, Lugalambo, Mubango, Mawakota, Sezibwa in Uganda.

354. **Barbatula duchaillui** ? subsp. nov.

The specimens from East Africa, although agreeing with the Uganda birds in coloration, are larger and probably belong to a southern race. Wings: 83, 85, 85 mm.

Kisumu and S. Kavirondo.

355. **Barbatula scolopacea aloysii** Salvad. **Small Green-spotted Barbet.**

Budu, Lugalambo, and Elgon in Uganda.

The distribution of the named races of *B. scolopacea* requires defining. From the material available it would appear that :

B. scolopacea scolopacea is found in Ashanti, Sierra Leone, and South Nigeria.

B. s. stellata Jard. & Fras. : Fernando Po.

B. s. flavisquamata Verr. : Gaboon.

B. s. consobrina Rchw. : Congo to possibly Angola (Angola birds seem larger).

B. s. aloysii Salvad. : Uganda to Elgon.

356. **Barbatula leucolaima nyanzae** Neum. (*Journ. f. Orn.* 1907, p. 347). **Uganda Little White-eyebrowed Barbet.**

Ogilvie-Grant places this subspecies as a synonym of his *B. l. m'fumbiro*, but I do not consider this correct. In working over these Little Barbets, I have

checked Neumann's reviews of the group in *Journ. f. Orn.* 1911, and his division of this group appears correct.

Budongo, Bugoma, Kyetume, and Entebbe in Uganda.

357. **Barbatula subsulphurea ituriensis** Neum. (*Journ. f. Orn.* 1917). **Uganda Yellow-breasted Pigmy Barbet.**

A good subspecies, being very much more yellowish on the underside than *B. subsulphurea subsulphurea*, and having the yellow edging to the wing feathers more pronounced. The character given by Neumann—viz. the blue instead of green gloss on the head—is obvious in the type, but does not hold good in the other specimens. The type is a miserable, much-soiled specimen.

Dividing the small Barbets into three species with so many subspecies as Neumann does, allows for the presence of three of these Pigmy Barbets in the same locality, each belonging to distinct species.

Budongo, Mabira, Kyetume, in Uganda.

358. **Barbatula bilineata fischeri** Rchw. **East African Yellow-breasted Barbet.**

This bird is remarkably like *B. leucolaima nyanzae*, but paler yellow on the abdomen. It appears to be an uncommon bird. It is possible that the mainland bird may be separable from the birds of Zanzibar—the type locality of this subspecies of the South African *B. bilineata*.

Changamwe and Mombasa. 2 ♂, April and May.

359. **Barbatula bilineata** ? subsp. nov. **Grey-breasted Pigmy Barbet.**

3 ♂ and 3 ♀ have a distinctly grey throat and breast and the rump is canary-yellow. Wings, 50–56 mm. This form is met with from Ukambani to Nakuru district, but north of this occurs a larger, paler one, which is apparently typical *B. jacksoni*.

Nairobi, Kyambu, Naivasha.

360. **Barbatula bilineata jacksoni** Sharpe. **Jackson's Pale-breasted Pigmy Barbet.**

This bird (type locality Ravine) is very like the preceding, but much clearer yellowish below, not so grey on the breast, and has the rump rather darker yellow-chrome. It is larger, with wings of 55–59 mm. The distribution, so far as is known, is from Molo north to Kakamegoes and Elgon.

Molo, Elgeyu, Kakamega, Kitosh, Elgon, and Bukedi in Uganda.

361. **Viridibucco simplex simplex** Rchw. **Little Olive Barbet.**

This species occurs in the Seyidi Province south of Mombasa, and is rare.

Morogoro, Tanganyika Territory.

362. **Viridibucco simplex leucomystax** Sharpe. **White-moustached Olive Barbet.**

I have not met with this bird south of Kitui, Ukamba, and in its northern limits not beyond Mt. Elgon.

Mt. Elgon, Bukedi, Uganda; Elgeyu, Marakwet, Burnt Forest, Aberdare Mts., Nairobi.

363. **Pogoniulus pusillus affinis** Rchw. **Red-fronted Pigmy Barbet.**

The revision of the races of this little Barbet, by C. Grant (*Ibis*, 1915, p. 443), appears correct, though in certain instances the descriptions he gives are inadequate. The relationship between this race and the next is very close, for amongst my series there are three adult birds from Kitui and Sagala, Teita, with reddish-orange rumps.

Some birds have the hind margin of the red frontal patch outlined with yellow feathers of a different character to the actual red feathers forming the patch. In my series the wings vary from 47 to 57 mm.

Lamu, Changamwe, Manugu, Kibwezi, Sagala, River N'ziu, Ukambani, Simba, Kendu Bay, Mt. Kenia, Baringo; and Olgerei, Narossora (A. B. Percival coll.), and Mt. Moroto, Kerio River, in Uganda.

364. **Pogoniulus pusillus uropygialis** Heugl. **Red-rumped Pigmy Barbet.**

Type locality Eritrea. It is possible that this race extends to N. Rudolf. It is of interest to note that of sixteen specimens of this race only five have the red rump.

365. **Pogoniulus chrysocomus centralis** Rchw. **Uganda Yellow-fronted Pigmy Barbet.**

Although C. Grant limits the range of this race to Uganda, it is not surprising to find it extended into East Africa south-west of the Nandi Escarpment, as do quite a number of Uganda forms. It is possible that the extreme East African birds will prove to be a further race, as they are rather paler yellow on the underside than West Uganda specimens and slightly larger. Wings: 62 and 63 mm., as against 57–60 mm.

Nyarondo, Kibos, and Kibigori in East Africa.

366. **Trachyphonus erythrocephalus** Cab. **Large Red-headed Waxy Barbet.**

Pale lemon-yellow under tail-coverts are found in decidedly adult birds as well as in young, thus I doubt if it can be reckoned a character of immaturity. One male specimen has a bill 32 mm. long!

Young birds are coloured as in females.

T. e. versicolor Hartl. is probably not a good race.

Masongoleni, Maungu, Tsavo, Kitui, Simba, in East Africa; and Kerio River and Mt. Moroto in Uganda.

367. **Trachyphonus d'arnaudi d'arnaudi** Des Murs. **Uganda Waxy-headed Barbet.**

There is a certain amount of variation in these birds which makes it rather difficult to say whether *T. d. zedlitzi* Berger, from Baringo, is really a good form. It is probably only in a series that the characters claimed for this race can be appreciated. I cannot separate my two specimens from Baringo from birds from Moroto or Kerio River. The wing measures 63–76 mm.

C. Grant does not mention this race. *T. d'arnaudi d'arnaudi* has nothing to do with *T. d. usambiro* Neum. The forms do not actually meet.

Nile Province, Masindi, Moroto, Kerio, in Uganda; Nyarondo in East Africa.

368. **Trachyphonus d'arnaudi zedlitzi** Berger. **Baringo Waxy-headed Barbet.**

Baringo. ♂♀, 5.xii.1917.

369. **Trachyphonus d'arnaudi usambiro** Neum. **East African Waxy-headed Barbet.**

This distinct race has nothing to do with *T. emini* Rchw. C. Grant was quite in error when he described this bird as the female of *T. emini*, and figured it in the *Ibis*, 1915, p. 449. The type of *T. usambiro* was in Tring, but he appears not to have consulted it. He mentions this race when discussing the forms of *T. d'arnaudi*, but did not connect his Loita birds with it. It must be remembered that the male and female of *T. d'a. usambiro* are alike, as is also the case with *T. emini*.

T. d'a. usambiro can be recognised from the typical race by being larger, and by having a blackish bill, not horn-brown. The black patch on the breast is larger, the head and nape are yellower, and there is an almost complete breast-band of white-spotted black feathers.

The distribution, so far as at present known, is the Tanganyika Territory south of Lake Victoria Nyanza, into Kenya Colony, as far as the Loita Plains and Southern Uaso-n'yiro. Wings, 81–87 mm.

Loita and Usambara.

370. **Trachyphonus emini** Rchw. **Emin's Black-capped Waxy Barbet.**

In size this bird agrees with the preceding, but, as already pointed out, has nothing to do with it. The black crown and large black patch from the chin to the breast, the bright yellow nape and side of face and neck, finely spotted with blackish, and the distinct breast-band of white-spotted black feathers, render this bird easy of identification. Distribution from Lake Nyassa north to Tanganyika Territory.

371. **Trachyphonus böhmi** Rchw. **Böhm's Black-capped Waxy Barbet.**

I am not satisfied that this bird is really a subspecies of *T. d'arnaudi*. The black cap and the large black spot on the chest indicate separation.

The presence of this bird north-west of Kenia is of great interest.

Manugu, Bura, Sagala, Voi, Taveta, Campi-ya-bibi, Simba, N'ziu Ukambani, and West Kenia.

372. **Trachylaemus purpuratus elgonensis** Sharpe. **Yellow-billed Barbet.**

The known distribution of this bird is from West Uganda east to Elgon (type locality), and south to the Elgeyu Escarpment!

Mabira, Bumasifa, Elgon, in Uganda; Burnt Forest and Elgeyu in East Africa.

373. **Iynx torquilla torquilla** Lin. **European Wryneck.**

The occurrence of the European Wryneck in Uganda is certain, but so far there is no evidence of its being found in East Africa.

374. **Iynx ruficollis cosensi** C. Grant. **East African Wryneck.**

This race is recognisable, but there is a lot of variation in the character of the striping on the underside, some birds being very heavily striped, others having only narrow lines and spots. The extent of the brown on the throat, the rusty under tail-coverts, and the larger size separate this bird from *I. r. ruficollis* of South Africa. A young bird in first plumage has the broad patch on the throat indicated by a rusty wash which does not extend to the chin, the underside more mottled than striped, and the black markings on the back much larger than in adults.

Elgeyu, Burnt Forest, Naivasha, Nairobi, Loita, and Simba in East Africa.

375. **Campothera nubica nubica** Bodd. **Nubian Red-headed Spotted Woodpecker.**

In a variable species such as this it is difficult to define races. There are, however, certain characters by which, in large series, one can admit at least three races. These three are, however, not those admitted by C. Grant (*Ibis*, 1915, p. 452). I uphold one which Grant suppresses, I recognise as a distinct species a bird which he places as a synonym of *C. nubica nubica*, and I transfer one of Grant's subspecies of *nubica* to a subspecies of this species (*C. scriptoricauda*).

When a series of birds from Abyssinia, Somaliland, Sudan, Uganda, and East Africa is laid out, it will be noticed that those taken in East Africa from Kavirondo south to Nairobi are dark birds, this being due to the fact that the great majority are spotted on the back, not barred or with spear-shaped spots. The northern birds I place as *C. nubica nubica*, those of East Africa, within certain limits, as *C. nubica neumanni* Rchw (type locality Naviasha), and those from Somaliland, Jubaland, Tana, south to desert area of East Africa as *C. nubica pallida* Sharpe (type locality Lamu).

Individual birds from the distributions given can be matched by birds from other localities, but in a series the characters of the races can be recognised. For instance, I have a bird taken in the Sudan which exactly matches the pale birds of Lamu, but this is individual.

The characters of the races are as follows :—

C. nubica nubica Bodd (22 skins).—Upper surface olive-yellowish, barred or heavily spotted ; cheeks and malar region white barred and streaked with black ; under surface buffy to yellowish or whitish, generally the spotting smallish and limited to breast and sides.

Nubia, Abyssinia, Sudan, Uganda, and British East Africa = south-east of Elgon to Baringo.

376. *C. nubica neumanni* Rchw. (25 skins).—Upper surface darker above, more greenish, not so heavily spotted and *not* frequently barred ; cheeks and malar region darker, more blackish ; under surface more heavily spotted, with large spots which extend well on to the abdomen ; ground colour whitish or buff.

Kavirondo, south along the high country to Naivasha and Nairobi, and North Ukambani.

C. nubica pallida Sharpe (14 skins).—Much paler above, more greyish olive, heavily barred with whitish, very pronounced on inner secondaries and

scapulars ; cheeks and malar region pale, lighter than in typical bird ; underside less spotted than in *C. nubica nubica*.

Somaliland south to Jubaland and Lamu down to Mombasa and through to dry Taru desert country to East Kilimanjaro and South Ukambani. Where these subspecies meet, intermediate forms occur. Some birds have reddish tips to the feathers of the mantle !

C. n. nubica I have obtained from Masindi, Elgon, Kyetume, Suk, Kerio, Moroto, Turkwell ; *neumanni* from Kakemega, Fort Ternan, Nakuru, Naivasha, Escarpment, Nairobi, Machakos.

377. **Campothera nubica pallida** Sharpe. **Red-headed Barred Woodpecker.**

The characters and distribution of this subspecies are given above.

Lamu, Manda, Manugu, Changamwe, Tsavo, Voi.

378. **Campothera scriptoricauda** Rchw. **Yellow-billed Woodpecker.**

Instead of uniting this bird with *C. nubica*, I place it as a distinct species. The characters given in the original description hold good in the three specimens before me. They are : more narrowly barred upper surface, tail blackish for 20 mm., breast and sides with small spots, *spotting extending to throat and chin*, paler cheeks and ear-coverts, and (most important of all) the yellow lower mandible ! These are adult breeding birds.

Seeing that the distribution of this species and *C. nubica pallida* coincide for a large part without the presence of intergrades, they cannot be subspecies of the same typical race.

The range of this species is : Lamu, along the coast to Mombasa and into Tanganyika Territory.

Mombasa and Morogoro.

Of this there is apparently another subspecies in Portuguese East Africa which has been named *C. s. albifacies* by Gurney and Roberts, the characters being the wide white superciliary stripe extending back to the nape, throat and chin spotted as in the typical form.

379. **Campothera abingoni mombassica** Fisch. and Rchw. **Stripe-breasted Green Woodpecker.**

I have come to the same conclusions as Prof. Neumann (*Bull. B.O. Club*, 1908), with the exception that I consider the birds from Lake Kivu and Baraka to belong to a distinct smaller race.

Mombasa district north to Lamu and South Somaliland ; specimens from Mombasa, Changamwe, Mazeras obtained.

380. **Campothera abingoni suahelica** Rchw. **Pale Stripe-breasted Green Woodpecker.**

This race is characterised by having the abdomen and underside not so spotted or streaked as in the typical form, and is thus paler, besides being greener above. In the female the white spots to the fore part of the crown are elongated, not round.

The distribution is Tanganyika Territory from Vanga and Kilimanjaro to Mozambique : Lumbo, Portuguese East Africa, collected by Loveridge.

381. **Campothera caillianti caillianti** Malh. **Spotted-breasted Green Woodpecker.**

(= *C. malherbi.*)

My birds are typical, with the exception of those taken in July at Dar-es-Salaam. These two southern birds are heavily spotted on the underside with large spots, whereas the Mombasa and Changamwe ones are all uniformly small spotted. Wings, 93–99 mm. The spotting on the back is large (cf. *C. c. nyansae*).

Mombasa, Seyedi Province north to Malindi and south to Zanzibar, and Dar-es-Salaam.

382. **Campothera caillianti nyansae** Neum. **Nyansa Spotted-breasted Green Woodpecker.**

I am satisfied that this is a good race. In the series of ten skins before me the backs are almost uniform green or only with small ill-defined spots, while on the underside the spotting is heavy and large. These birds are larger than the coastal form, having wings of 95–109 mm.

South of Victoria Nyanza, north-west to Kagua and Kasaka in Uganda, and south-west to Lake Kivu, Tanganyika, and North-east Rhodesia.

383. **Campothera caillianti fülleborni** Neum. **Southern Spotted-breasted Green Woodpecker.**

Portuguese East Africa and Nyassaland.

Lumbo in Portuguese East Africa. ♂, August. Collected by Loveridge.

384. **Campothera caroli budongoensis** subsp. nov. **Uganda Chestnut-cheeked Woodpecker.**

Uganda birds are greener on the upper surface than *C. caroli caroli*, less golden, and have the spotting on the underside pale yellowish, except on the throat and fore neck, where it is whitish. Eighteen skins from Uganda show these characters to be constant. The young are altogether darker than adults, and are very like Gaboon birds.

Belgian Congo, east to Uganda as far east as the Mabira Forest and Elgon ; Budongo, Bugoma, Mawakota, Lugalambo, Mubango, in Uganda. Type, ♀ ad., Bugoma Forest, 20.x.1913.

One other subspecies described by Oberholser as *C. caroli arizelus* from Liberia and Sierra Leone appears a good race, having the underside greener and the spotting bigger and more widely separated.

Another possible race are the birds from South Nigeria and North Kamerun, which have the throat much whiter, caused by the spotting being larger and show a tendency to run together.

385. **Campothera nivosa herberti** Alex. **Lesser Barred-breasted Green Woodpecker.**

Rather greener above than type. My series of thirteen agrees perfectly with the two birds I collected in 1913–14 in the Mabira Forest and which were compared with the type in the British Museum. This bird is no doubt a subspecies of *C. nivosa nivosa* from the Gambia ; adult males, which apparently were unknown, are similar to the females, but possess a bright red nape-crest.

Kasala, Budongo, Bugoma, Mibira, Kyetume, Kyanja, in Uganda.

The following races can be recognised :

C. nivosa nivosa Sw. : Head brownish olive ; upper surface brownish golden green, underside brownish olive spotted whitish.—Gambia, Sierra Leone, Fanti, and possibly South Nigeria.

C. nivosa poensis Alex. : Very like *nivosa nivosa*, but more brownish olive above, not so golden, head brownish olive-green, underside darker olive-brown, throat buffy, streaked.—Fernando Po.

C. nivosa efulensis Alex. : Very like *nivosa*, but head darker, more olive-green, upper surface olive-green, under surface clear olive-green, throat yellowish washed and streaked.—Kamerun and Angola.

C. nivosa herberti Alex. : Head dark green, upper side bright olive-green, under surface bright olive-green, throat whitish, streaked.—Belgian Congo to Uganda, as far as the Mabira Forest.

C. nivosa ? subsp. nov. : Head greyish olive-green, back dull olive-green, no yellow tinge, underside greenish grey spotted and barred. As I have no fully adult birds, I refrain from naming this form.—Elgon, south to Nandi.

386. **Campothera taeniolaema taeniolaema** Rchw. and Neum. **Broad-barred Green Woodpecker.**

The type locality is not exactly given in the original description, but merely Mau and Eldoma Ravine. I have eight typical birds, agreeing perfectly. *C. hausburgi* Sharpe has been suppressed, but the differences between the Ravine birds and those from Kenia is so marked that I am inclined to reinstate the subspecies.

Elgeyu, Ravine, Marakwet, Nandi.

387. **Campothera taeniolaema hausburgi** Sharpe. **Narrow-barred Green Woodpecker.**

In comparing my series of 5 ♂ 5 ♀ with two topotypical skins this race appears quite evident, but intermediates occur where the races must meet.

Kenia, Fort Hall, Nairobi, Nakuru, intermediate at Molo.

Characters of races :

C. taeniolaema taeniolaema Rchw. & Neum. Type, Eldoma Ravine.—Dull green above, throat and cheeks white, barred blackish ; underside white, widely barred with green and washed faintly with green.

Mau, Sotik, to Elgeyu and Kakamegoes and Elgon.

C. taeniolaema hausburgi Sharpe. Type locality, Kenia.—Brighter green above with yellow tinge ; more finely barred below, especially on the cheeks and throat ; underside washed yellowish.

Mt. Kenia, Fort Hall, east to Nairobi and Aberdare Range, and south to Ukamba.

388. *C. taeniolaema barakae* van Someren. Type locality, Baraka, North Tanganyika (*Bull. B.O. Club*, February 1920).—Not so yellowish green above as *C. t. hausburgi*, but throat and breast more decidedly barred with blackish dark green and darker green on the abdomen, on a yellowish ground. Size generally

smaller. The black cap of female extends far back and the red nape-tuft is correspondingly decreased.

North-west of Tanganyika, Lake Kivu north to the Mpanga Forest in Toro. The specimen obtained by the Ruwenzori Expedition and called *taeniolaema* by Grant would probably belong to this new subspecies.

389. **Mesopicos goertae centralis** Rchw.* **Uganda Golden-backed Woodpecker.**

This subspecies is quite distinct and easily recognisable by its much darker coloration compared with *M. goertae goertae*, from Senegambia.

Masindi, Toro, Entebbe, Kawala, Moroto, in Uganda; Soronko River, South Elgon, Kerio, and Baringo in East Africa.

390. **Mesopicos goertae koenigi** Neum.

I do not agree with C. Grant (*Ibis*, 1915) that this is a synonym of *M. g. centralis*. Eight birds from Nubia, Sudan, and west to Njam Njam, are uniformly paler below and above, with the back greyish olive-yellow, and the abdominal patch quite different from *M. g. centralis*, being more circumscribed, not so diffuse and of a bright red edged with golden.

Out of eighteen skins of *M. g. centralis* there is not one approaching the pale Nubian birds. I therefore uphold the subspecies.

Mesopicos goertae abyssinicus Rchw., North Abyssinia, is possibly a northern race of *M. g. goertae*, as there is a specimen in Tring which agrees with Reichenow's description and it is not *M. spodocephalus*, specimens of which Reichenow undoubtedly had.

The range, however, assigned to this race is too wide and included that of *M. g. koenigi*!

391. **Mesopicos spodocephalus rhodeogaster** Fisch. and Rchw. **East African Golden-backed Woodpecker.**

This is a good race. It is interesting to note that in part of their range *M. g. centralis* overlaps *M. spodocephalus rhodeogaster* without any interbreeding as far as we know (cf. Sclater & Praed, *Ibis*, 1919).

Fort Hall, Nairobi, Naivasha, Simba, and Kisumu.

392. **Mesopicos ruwenzori** Sharpe. **Ruwenzori Olive-bellied Woodpecker.**

Apparently limited to the "Central Lake region."

393. **Mesopicos ellioti** subsp. ? **Uganda Buff-cheeked Woodpecker.**

♂♀, 20.xii.1915. These birds are brighter grass-green above than specimens from the Ituri and Lake Kivu, and have uniform buff cheeks without any greenish wash, this colour extending from the loral spot to the ear-coverts. They have smaller bills but longer wings. Possibly an eastern race.

North Elgon.

* Cf. Nov. Zool. 1921, p. 103.—[E. H.].

394. Mesopicos xantholophus chloroticus van Someren. **Uganda Yellow-crowned Olive Woodpecker.**

Bull. B.O. Club, xli. p. 105, 1921.

Greener above and below than *M. x. xantholophus*, generally with brighter golden tinge to the rump and less spotted below on the centre of the underside. Wings: 110–122, as against 100–120 mm. of Gaboon and N. Angola birds.

Uganda from Elgon and Nandi west to North Tanganyika (Bugoma, Lugalambo, Kasala, Mubango, Elgon, Kakamega). Type: ♂ Lugalambo, 5.xi.1915.

395. Thripias namaquus schoensis Rüpp. **White-faced Black-breasted Woodpecker.**

Two races are distinguishable, but it appears that they can only be recognised in series. Thus eight out of ten of my birds agree better with *T. n. schoensis* than *T. n. intermedius*, though they are not absolutely identical.

Kerio River, Soronko River, Suk, and Baringo.

396. Thripias namaquus intermedius C. Grant. **White-faced Grey-breasted Woodpecker.**

My ten birds agree with Grant's description of the Ugogo birds and birds from S. Uganda, and thus the range of this race is extended into East Africa.

Nine out of ten have grey and barred undersurface, while two show a tendency to assuming a blackish-olive breast, spotted with white, showing gradation into the *schoensis* type of plumage. Such birds are found from Nairobi to Nakuru and the Elgeyu Escarpment.

Olgerei, Narorsera (A. B. Percival coll.), Tsavo, Kitui, Kyambu, and Nairobi in East Africa.

397. Dendropicos poecilolaemus Rchw. **Uganda Speckled-breasted Little Woodpecker.**

D. p. nandensis Neum. (Nandi).

The *young* birds agree perfectly with Neumann's description of *D. p. nandensis*, which becomes a synonym. They are greyish green above on the mantle and wings, and greyish below with blackish spots, thus looking very different from the adults.

Budongo, Bugoma, Entebbe, Busiro, Sezibwa, Lugalambo, Mubango, Kyetume, and Elgon in Uganda.

398. Dendropicos lafresnayi lepidus Rchw. **Uganda Streaky-breasted Small Olive-backed Woodpecker.**

The young are greyer on the back than adults and more heavily streaked. Some birds are less banded on the back than others and approach *D. abyssinicus hartlaubi*, but there should be no difficulty in distinguishing these two birds. The records of *D. hartlaubi* from Uganda undoubtedly refer to *D. l. lepidus*.

Nairobi, Escarpment, Aberdare Mts., Burnt Forest, Elgeyu, Elgon, Kendu Bay, Fort Ternan, in East Africa; Budongo, Kigezi, S. Ankole, Bugoma, Bumasifa, Kibengei, Entebbe, in Uganda.

399. **Dendropicos abyssinicus hartlaubi** Malh. **Zanzibar Golden-backed Woodpecker.**

(= *D. a. zanzibari.*)

Has been obtained at Mombasa and along the coast, but does not go far inland. Type locality Zanzibar and adjacent coast of mainland. Records of *D. hartlaubi* from Uganda are certainly erroneous. They refer, no doubt, to brightly coloured *D. lafresnayi*, which lack bars to the mantle.

400. **Dendropicos fuscescens massaicus** Neum. **Small Barred-backed Woodpecker.**

The reference given by Claude Grant for the type locality of this bird is misleading, as Lake Nguruman is not north of Lake Victoria. My large series of 17 ♂ and 13 ♀ is most uniform, with the result that those birds I have referred to other subspecies stand out quite conspicuously when placed alongside this series. The races admitted by Claude Grant are in the main correct, but I differ from him in recognising at least two forms which he unites, one as "*hemprichi*" and the other as "*massaicus.*"

Changamwe, Maungu, Masongoleni, Voi, Taveta, Tsavo, Kerio River, Turkwell River, in East Africa; Mt. Moroto in Uganda.

401. **Dendropicos fuscescens centralis** Neum. **Golden-barred Little Woodpecker.**

♂, 3.vii.17; ♀, 25.vii.18. These birds differ so markedly from *D. f. massaicus* that I am compelled to recognise them as distinct. They are more distinct from *D. f. fuscescens* than "*massaicus*" is from the typical bird. Above they are more yellow-golden and distinctly barred, the golden colour being present on the wings, especially on the cross bars to the primaries and secondaries. The underside is less heavily streaked and washed with yellow. The females have a brown head lacking the black nape, and the males lack the red tips to the upper tail-coverts. Wings, 90 mm.

Central and South Tanganyika Territory to North Nyassaland and Mozambique.

(Morogoro in Tanganyika Territory and Lumbo in Portuguese East Africa.)

402. **Dendropicos fuscescens albicans** Zedl. **Pale-barred Little Woodpecker.**

Type locality Juba River. The Lamu and Manda birds are very much paler than *D. f. massaicus*, that I am prepared to support Zedlitz's subspecies. Eight specimens from this locality agree, with the exception of one youngish female.

Jubaland south to Lamu and Manda and adjacent portions of mainland.

403. **Iyngipicus obsoletus obsoletus** Wagl. **Western Grey Pigmy Woodpecker.**

Two birds from Masindi cannot be distinguished from the Senegal birds either in size or colour. They have wings of 80 and 81, while in Senegal birds they range from 75 to 82 mm.

Masindi to Gondokoro.

404. **Iyngipicus obsoletus ingens** Hart. **East African Grey Pigmy Woodpecker.**

I am satisfied that birds taken in Eastern Uganda, north to Moroto, cannot be separated from East African ones, and must all be placed under the name given above. Some birds are dark, some pale, but the proportion of dark and pale birds is equal in northern and southern specimens. Further, the wings of birds taken in North Elgon area are as large or larger than Nairobi birds (typical *I. o. ingens*). Young birds are much darker above and below than adults—thus I am inclined to view Neumann's *I. o. nigricans* from South Ethiopia with doubt, as he based it on insufficient material. *I. o. heuglini* is a good race, being paler throughout. The wing measurements of my series of fifteen vary from 84 to 92 mm.

Ukambani north to Elgon and Moroto, Turkanaland.

(Moroto in Uganda; Kerio, Suk, Soronko River, Kimiriri River, Fort Ternan, Kibos, Kisumu, Escarpment, Nairobi, Fort Hall, Kitui, in Kenya Colony.)

(In reviewing the Colies I have compared birds from type localities, and my results include only those species and races which concern the student of British East African and Uganda ornithology.)

405. **Colius striatus affinis** Shell. **Dar-es-Salaam Coly.**

Type locality, Dar-es-Salaam. 5 ♂, 1 ♀, 1 juv., all from the type locality and all uniformly coloured, showing no variation. The confusion which has arisen over this bird and its near relations must be due to the fact that authors have not compared typical birds. A description of the typical bird is as follows (colours as in Ridgway's *Nomencl. Col.*): Top of head, including crest, neck, and mantle, avellaneous brown, the mantle very faintly barred. Cheeks very pale smoke-grey, not sharply separated from the smoke-grey of the throat, which is uniform and a shade darker, while the rest of the throat is but faintly barred, especially where it merges into the avellaneous brown of the chest. The lower breast and abdomen are light buff. Wings and scapulars buffy brown, tinged with a slight olive wash. Rump and upper tail-coverts uniform avellaneous brown. Wings: 86, 89, 89, 89, 91, 91.—Young birds are like adults, but lack all signs of barring and have the back mottled with buff tips to the feathers, and the lesser coverts tipped with rusty. Lower mandible black, base of upper pinkish.

Dar-es-Salaam, Zanzibar and adjacent coast, inland to South Tanganyika Territory and coast of Mozambique.

406. **Colius striatus berlepschi** Hart.

The nearest to "*affinis*" inland is *C. s. berlepschi* Hart., which differs in having the back and wings darker, more tinged with olive-brown, and the underside darker.

South-west Tanganyika Territory, round north of Lake Nyassa (type locality), and North-east Rhodesia.

407. **Colius striatus mombassicus** van Someren. **Mombasa Grey-cheeked Coly.**
Bull. B.O. Club, November 1919.

Type ♂, 19.vii.1918, Mombasa. These birds are quite distinct from *C. s. affinis*, from Dar-es-Salaam, being more greyish on the head, neck, and mantle, the neck and mantle being distinctly barred, the bars more widely separated than in *C. s. affinis*. The cheeks are whiter; the throat is more barred, in a similar way to the mantle. Breast and abdomen darker. Wings and tail more greyish; rump and upper tail-coverts barred. Wings: 87, 87, 90, 90, 92 mm.

Mombasa, north to Kismayu and possibly South Somaliland, on the coast and inland as far as Voi.

(Mombasa, Changamwe, Samburu, Lamu and Manda and M'koi.)

408. **Colius striatus kikuyensis** van Someren. **East African Black-throated Coly.**
Bull. B.O. Club, November 1919.

The central Kenya Colony or highland race differs from the coastal form in having the head and neck saccado-umber, mantle slightly darker, faintly barred, lores and base of forehead blackish, cheeks and throat blackish with the feathers tipped greyish, ear-coverts silver-grey. Lower throat and breast buffy brown, barred blackish; lower part of breast and rest of underside light buff. Wings and tail deep greyish olive; rump and upper tail-coverts saccado-brown, barred. A large bird, with wings of 100, 100, 101, 101, 102, 103, 104, 107 mm.

South Ukambani to Kavirondo, including the Loita Plains and east to Kenia. Thirteen skins from Nairobi, Ruiru, Fort Hall, Escarpment, Kyambu, Burnt Forest, Nakuru, Naivasha. Type ♂, 14.v.1918, Nairobi.

409. **Colius striatus ugandensis** van Someren. **Uganda White-cheeked Coly.**
Bull. B.O. Club, November 1919.

Type ♂, 28.v.06, Chagwe. Eighteen specimens examined.

Crown and mantle wood-brown to buffy brown, the latter barred; wings and tail not so dark as in *C. st. kikuyensis*, but greyish olive. Rump and upper tail-coverts brownish olive. Cheeks greyish, ear-coverts white, especially at the posterior border; throat blackish, tipped whitish. Upper breast ochraceous buff, barred with brownish black. Rest of undersurface ochraceous buff, thus darker brownish than in East African specimens. Wing, 100–99 mm.

Uganda, from Lake Albert and Ruwenzori to Elgon and Turkwell River.

(Ankole in Toro, Chagwe, Kampala, Entebbe, Jinja, Moroto, Kerio.)

The other recognisable races are:

C. striatus striatus Gm: Cape to Knysna district.

C. s. nigricollis: Portuguese Congo and possibly Cameroon.

If Cameroon birds differ, they will be called *C. s. nigriscapalis* Rchw.

C. s. leucotis Rüpp.: North Abyssinia, Eritrea.

C. s. hilgerti Zedlitz (? *C. s. erlangeri*): South Abyssinia, north South Ethiopia, Omo district, northern frontier of East Africa, North Somaliland.

C. s. jebelensis Mearns: Nile district, Gondokoro to Niam Niam.

C. s. minor: Natal to Transvaal and South Portuguese East Africa, South Nyassaland.

C. s. cinerascens Neum.: Central Tanganyika Territory to south of Lake Victoria.

410. **Colius leucocephalus leucocephalus** Reichw. **White-headed Coly.**

My series of 7 ♂, 4 ♀, 2 juv. of a species rare in collections shows no variation in colour. They were breeding at the time they were collected (August 1918), and eggs and young were taken. The eggs are white, or with a few brown marks and with a matt surface. The young resemble the adults, but the feathers of the mantle are tipped and edged with rusty. The pink on the breast is absent and the barring in the throat not developed. The whole of the lower bill is black. Crest well developed. In adult birds the crest is not pure white, but creamy, tinged with buff and greyish towards the tips of the hind feathers.

The range of the typical bird is the Teita country and south of Kilimanjaro. Possibly the specimens obtained by Zedlitz and Erlanger from South Somaliland are not typical, as those from north of Mt. Kenia differ and have been described as a new race.

Maungu, Masongoleni, and Taveta.

411. **Colius leucocephalus turneri** van Someren. **Grey-naped Coly.**

Bull. B.O. Club, xl. p. 27, 1919.

This race differs in having the neck and mantle more clearly barred, more greyish, and the wings, back, and rump deeper grey. The vinous pink is more restricted in area, being confined to the upper breast and sides, while the lower breast and abdomen are ochraceous buff. The throat is slightly darker. The cheeks are greyish, not brownish as in *C. l. leucocephalus*, and the crest feathers and those of the forehead are pure white, the former deeply tinged with smoke-grey.

The known range of this bird is the northern Guasso N'yiro. (Archer's Post, five skins.)

412, 413. **Colius macrourus pulcher** Neum. **East African Blue-naped Coly.**

(Type locality, Bura.)

Claude Grant (*Ibis*, 1915) recognised only two races of *Colius macrourus*, but there are evidently more, and he can hardly have examined specimens from northern Abyssinia. The birds from Eritrea are Oberholser's *syntactus*; they are very pale.

The Bura birds are darkest, having the back deep ashy washed with bluish green, from the crown to the wings. The rump and upper tail-coverts are slightly paler. The undersurface of the wings darker than in *U. m. macrourus*. The throat not so whitish, more tinged with pinkish, the crest with a greyish tinge. The chest deep vinous pink and the abdomen darker. The nape-patch is shiny squil-blue, that of *U. m. macrourus* pale sky-blue. *U. m. pulcher* is a good race; the wing measurement of my series 86, 87, 87, 89, 90, 90 mm. The birds in the second series, collected during practically the same months but from farther north, i.e. Turkana to Uganda, are paler than typical *U. m. pulcher* and resemble more the birds from South Ethiopia. They have the throat and breast more pinkish than *U. m. macrourus*, but *not* so dark as in *U. m. pulcher*. The forehead, crest, and nape more brownish than typical race. The underside paler than *C. m. pulcher* and the upperside less bluish green—paler, and tinged with brownish.

The nape-patch is sky-blue, not squil-blue as in *C. m. pulcher*. It appears, therefore, that this race is intermediate between *C. m. syntactus* and *C. m. pulcher*; and as the type localities of these two are so widely separated, they may form another subspecies. Wings, 90–96 mm.

South Abyssinia and North-east Uganda to Lake Rudolf.

SERIES I.—Six specimens. Bura, Teita, Sagala, Magadi, Tsavo, M'buyuni, Escarpment and Kisumu, South Kavirondo, Island of Manda, Lamu.

SERIES II.—Twelve specimens. Kimiriri, Suk, Turkwell, Moroto, Rudolf.

In the Lake Edward and Kivu district to North Tanganyika we find a dark race which is near *C. macrourus pulcher*, but differs in having the crown more greyish; the blue nape-patch breman-blue, not squil-blue; the wings and mantle tinged more greenish, less bluish, and the throat not differently coloured to the breast, but the whole vinous, washed with *grey*. Abdomen tinged greyish, not buff. Wings, 88–95 mm. (four specimens).

This race I have named. I am inclined to separate also the birds from Manda and Lamu Islands, as they seem to me much paler than the other races.

414. **Colius macrourus griseogularis** van Someren.

Bull. B.O. Club, November 1919.

With a range from Lakes Albert Edward and Kivu to North Tanganyika.

It is only by having large series that these races can be appreciated. I have endeavoured to compare only birds in similar and unworn stages of plumage. These races, having arisen from a common stock, do occasionally produce "reversions" or, where races meet, supposed "hybrids."

415. **Apaloderma narina** subsp. ?

I cannot detect any difference between males from East Africa and Uganda and those from the type locality in South Africa. In the females, however, it is quite noticeable that South African birds are brighter rufous on the lores, throat, and breast, and lack the broad grey band on the chest which is present in East African and Uganda birds. In northern birds the brown of the chest is shot with greenish, giving this area a darker appearance. I have not sufficient South African females, but refrain from identifying the northern birds with the southern. Young birds, after passing through the spotted plumage, assume a plumage like that of the female, but differ in having pale terminal spots to the lesser coverts and occasionally on the secondaries. It is not until the third plumage that the red underside is assumed.

Bugoma, Budongo, Butambara, Mawakota, Elgon, in Uganda; Elgeyu, Naivasha, Nairobi, and Kyambu in East Africa.

416. **Heterotrogon vittatum vittatum** Shell. **Bar-tailed Trogon.**

These birds are not so common as the white-tailed species. The call is much the same, but of a higher pitch. A series of eighteen adult birds. Owing to lack of material I am unable to compare these birds with typical specimens.

Elgon in Uganda; Elgeyu and Kyambu Forest in East Africa.

417. **Heterotrogon vittatum minus** Chapin.

Is probably the form which inhabits West Uganda, as it occurs in the forests of the Belgian Congo. I have no specimen from this locality for comparison, but do not think that Uganda birds are the same as East African examples. The males are darker crimson, and the females darker on the breast; I have, however, insufficient material.

418. **Pitta angolensis longipennis** Reichw. **Uganda Pitta.**

This bird must be more plentiful than supposed. I have records of its occurrence in the forests of Bugoma, Budonga-Mabira, in Uganda, and Kyambu in East Africa.

During the dry season this bird was not seen in Bugoma, but appeared again during the rains.

Bugoma Forest, Uganda. ♂, 7.vi; ♀, 4.vii.1919.

419. **Coracias naevia naevia** Daud. **White-naped Roller.**

(*C. sharpei.*)

I have compared my five birds with a large series of Senegal ones, and can find no constant difference. There is a tendency for eastern birds in fresh plumage to have the heads more rufous, without the greenish tips to the feathers of the crown which is present in most fresh Senegal birds. The forehead is more broadly whitish. More East African material is required.

Fort Hall, Kisumu, Nairobi, and Kitui.

420. **Coracias garrulus garrulus** Linn. **European Roller.**

In full plumage and showing no wear in February and March. A common winter visitor.

Tsavo and Nairobi.

421. **Coracias caudatus caudatus** Linn. **Lilac-breasted Long-tailed Roller.**

(*C. c. suahelicus* Neum.)

The colour of the rump varies from deep ultramarine to pale blue.

Changamwe, Lamu, Kitui, Simba, Kimiriri River, Elgon.

422. **Coracias caudatus lorti** Shell. **Lilac-throated Long-tailed Roller.**

Type locality, Somaliland.

I wish to draw attention to the fact that these birds are found in localities where *C. c. caudatus* occurs, and this not at a period of migration, in January, March, April, June, and August. The question to be settled is, are these birds stragglers from Somaliland or are they resident, and should they not be reckoned a species ! ?

The rump varies from deep blue to pale blue in birds from the same localities.

Lamu, Mombasa, Tsavo, Simba, Sagala, and Naivasha.

423. **Coracias abyssinus abyssinus** Bodd. **Blue-breasted Long-tailed Roller.**

This bird ranges over part of the distribution of *C. c. lorti* and *C. c. caudatus*, and is kept as a species. Full-plumaged birds, not worn, in March and April.

Kobua River, Turkwell River, Moroto, in Uganda.

424. **Eurystomus afer suahelicus** Neum. **Eastern Yellow-billed Roller.**

Nairobi, Kitui, and Kyambu.

425. **Eurystomus afer rufobuccalis** Rchw. **Brown-cheeked Yellow-billed Roller.**

Type locality Lake District in Uganda.

These birds have no purplish violet on the side of the head, and are paler than the other subspecies. Apparently does not occur in East Uganda!

Bugoma, Toro, in Uganda.

426. **Eurystomus afer aethiopicus** Neum. **Black-tailed Yellow-billed Roller.**

I have compared my two birds with Neumann's type and cotypes. They agree perfectly, having the central pair of tail-feathers jet-black. The lateral rump and tail-coverts dull blackish blue, central ones brownish tinged with blackish; darker on the back than any other race of *E. afer*.

Moroto and Kisumu.

427. **Eurystomus gularis neglectus** Neum. **Blue-throated Chestnut Roller.**

1 ♂, August, agrees perfectly with birds collected in 1914. The majority of Angolan birds have blue rumps and blue central tail-feathers.

Bugoma Forest, Uganda.

428. **Bucorvus abyssinicus** Bodd. **Abyssinian Ground Hornbill.**

This species appears to extend as far south as the Turkwell River, but I am not aware that its range actually meets that of the southern species.

429. **Bucorvus cafer** Schleg. **Southern Ground Hornbill.**

I had a ♀ in captivity for almost two years, and previous to my obtaining it, it had been caged for about four months. When it died it was just beginning to assume the red-and-blue coloration of the throat pouch—that is, at practically two and a half years old. The parents of this bird nested in a hole in a cliff side at Naivasha year after year, one young being produced at a time. From my observations it would appear that the young of successive seasons do not leave their parents until they are mature; thus I have frequently noticed that when one finds a small party, there are usually two adult birds and perhaps three young of various ages, from a young of the year to a young of two to three years old.

430. **Bycanistes subcylindricus** Scl. **White-winged Crested Hornbill.**

(= *subquadratus* [♀] = *alloysii* Salvad.)

I do not consider *B. alloysii* to be distinct from typical *B. subcylindricus*; the amount of white to the tip of the central tail-feathers varies in individuals.

Mabira Forest, Uganda; Yala River, in East Africa.

431. **Bycanistes cristatus** Rüpp. **Black-winged Crested Hornbill.**

Common in the larger forests, but occasionally wandering to the larger trees on open land near forest country.

Nairobi, Kyambu.

432. **Bycanistes buccinator** Temm. **White-breasted Crowned Hornbill.**

Sometimes numerous in the thick thorn-bush country of the Taru district.

Samburu, Manugu.

433. **Lophoceros fasciatus fasciatus** Shaw. **Ivory-billed Hornbill.**

Certain specimens from Uganda and Gaboon show a tendency for the second and third tail-feathers from the outer side to be black for the basal two-thirds, but the majority are typical.

Jinja in Uganda.

434. **Lophoceros melanoleucus suahelicus** Neum. **Red-billed Pied Hornbill.**

(? *L. m. geloensis* Neum.)

The amount of white on the side of the head and nape varies greatly, so that I am inclined to doubt the validity of *L. m. geloensis* Neum. from South Ethiopia (the supposed differentiating character being the greater amount of white on the head). I have examined the type, a much-damaged bird. *L. m. suahelicus* is a sound race.

Mubendi, Jinja, in Uganda; Sagala, Kyambu, and Lake Jipe in Kenya Colony; Morogoro in Tanganyika Territory.

435. **Lophoceros hemprichi** Ehrb. **Abyssinian Red-billed Hornbill.**

Mt. Moroto in Turkana in Uganda. A head only obtained.

436. **Lophoceros pallidirostris neumanni** Rchw. **Neumann's Pale-billed Hornbill.**

One specimen from the type locality. Not common in East Africa.

Taveta, Morogoro.

437. **Lophoceros flavirostris flavirostris** Rüpp. **Yellow-billed Hornbill.**

It seems to me that *L. f. somalicus* is founded on a female of the typical race. Seven adult males from Somaliland show no red on the lower mandible, two females have the basal half and the tip reddish, but this is also found in East African birds. Two birds, differing only in the colour of the lower mandible, otherwise alike, can hardly occupy the same locality.

Bura, Sagala, Tsavo, Manugu.

438. **Lophoceros deckeni** Cab. **Von der Decken's Hornbill.**

Quite distinct from the northern species. In referring to the text figure 3, p. 275, of C. Grant's paper in *Ibis*, 1915, I find that an apparent error has been made in the figuring, the males being transposed.

Samburu, Tsavo, M'buyuni.

439. **Lophoceros jacksoni** O.-Grant. **Jackson's Hornbill.**

A good species. One might at first be inclined to treat it as a northern race of *L. deckeni*, as the only difference other than the curve of the culmen appears to be that *L. jacksoni* is spotted on the wing-coverts and *L. deckeni* not, but I think it best to keep them as species.

Suk, Kerio River, Mt. Moroto, in Uganda.

440. **Lophoceros nasutus nasutus** Linn. **Black-billed Grey Hornbill.**

All fully adult.

Fort Hall and Kendu Bay in East Africa; Kyetume in Uganda.

441. **Lophoceros erythrorhynchus erythrorhynchus** Temm. **Red-billed Hornbill.**

It seems that the Abyssinian and N. Somaliland birds should be kept distinct from the Senegal one (on account of the narrower, less curved bill which these birds possess), as *L. e. leucopareus* Hempr.

Tsavo, Simba, Nairobi, in East Africa; Kacheliba, Suk, and Turkana.

442. **Halcyon chelicuti** Stanley. **Striped Kingfisher.**

A very variable common species.

Changamwe, Samburu, Simba, Kisumu, Kimiriri River, in East Africa; Entebbe, Masindi, Kyanja, and Kawala in Uganda.

443. **Halcyon albiventris orientalis** Peters. **Buff-breasted Kingfisher.**

No birds from the typical locality are available for comparison.

Mombasa, Changamwe, Kitui.

Halcyon leucocephala and subsp.

There is an interesting revision of this group by C. Grant in the *Ibis*, 1915, pp. 265–7. This has helped considerably to clear up the state of confusion into which these birds had fallen. Before coming to England I endeavoured to collect a large series of these birds from East Africa and Uganda, from the coast up to Lake Albert.

As to the name *A. semicaeruleus* Forsk., C. Grant has shown that this name must be limited to the South Arabian bird, and states that the Uganda and North-east African birds are the same as Senegal specimens, placing them all under the name *H. leucocephala*. I have, however, examined a series of Senegal birds and find them to be quite distinct from Uganda and East African ones, therefore the name *leucocephala* cannot be applied to these latter. The next names available are *hyacinthinus* Rchw. and *centralis* Neum. The first name must be restricted to birds inhabiting Zanzibar and the adjacent coast and North Mozambique.

Thus *centralis* must be used for the East African inland race, but cannot be applied to Uganda and South Abyssinian birds, which l name *H. l. ugandae*.

A careful study of the description and the figure of *swainsoni* Smith and a comparison with South African specimens reveals the fact that the bird described is certainly not the form which inhabits South Africa. In the Monograph of the Kingfishers it is stated (on the authority of Verreaux) that the specimen which Sir A. Smith described as coming from the "interior of South Africa" was in reality a Senegal specimen which Verreaux had given to Sir A. Smith. Hence the discrepancy between the description and South African specimens. The description fits Senegal birds only. *H. swainsoni* cannot be used for the pale brown-bellied birds which inhabit South Africa and Angola, and the next name available is *pallidiventris* Cab., type locality Angola. I find, on laying out my large series along with that of Tring, that these brown-bellied Kingfishers fall naturally into two groups: a dark-bellied and a pale-bellied one, and dark- and pale-bellied birds occur together in a large part of their distribution but remain distinct! I therefore recognise two species, each with several races, and classify them as follows:—

I. *Halcyon leucocephala.*

Halcyon leucocephala leucocephala Swains: Senegal, east to West Soudan.

H. l. semicaerulea: South Arabia.

H. l. ugandae: Uganda, South Abyssinia, Somaliland, and Lake Rudolf district.

H. l. centralis: East Africa south of Victoria Nyanza, Northern Tanganyika Territory, and Taru.

H. l. hyacinthina: Zanzibar and adjacent coast and North Mozambique.

II. *Halcyon pallidiventris.*

Halcyon pallidiventris pallidiventris Cab: Angola, Damaraland, to South Africa and Transvaal.

H. p. ogilviei: Nyassaland, Angoniland, to South Tanganyika.

H. p. kivuensis: North Tanganyika, Kivu, Albert Edward, and South Victoria Nyanza.

444. Halcyon leucocephala ugandae subsp. nov. Uganda Brown-bellied Kingfisher.

Uganda birds cannot be united with the Senegal birds, nor with the East African race. They are intermediate between the Senegal form and that of Arabia, *H. leucocephala leucocephala* and *H. l. semicaerulea*. They agree, however, with the birds from South Abyssinia and North Somaliland. They have light blue wings and upper tail-coverts, not tinged with greenish.

Masindi, Entebbe, Jinja, Mabira, Sio River, in Uganda; Kisumu and Kavirondo in East Africa. Type Kisumu, collected by Turner for Col. Meinertzhagen, in Tring Museum.

445. Halcyon leucocephala centralis Neum. East African Brown-bellied Kingfisher.

With a series of twenty skins it is obvious that one cannot unite these birds with *H. l. leucocephala* or with the Uganda race. The coloration of the blue of

the wings and tail, etc., is strikingly different and is, with the exception of one or two birds which are worn, deep blue with a slight violet tinge, quite uniform in the series. Furthermore, these birds are darker on the head than Senegal birds.

Lamu, Mombasa, Changamwe, Manugu, Voi, Sagala, Taveta, Simba, Nakuru.

446. **Halcyon pallidiventris** ?subsp. nov. **Uganda Pale-bellied Violet-winged Kingfisher.**

This bird undoubtedly belongs to the smaller, pale-bellied, violet-winged birds of the central lake district, which I have named above. I have now met with it on the *east* shore of Victoria Nyanza, from where I obtained 2 ♂, and conclude that it must have wandered out of its true habitat. There can be no doubt, however, as to its correct identification. The birds obtained by the Ruwenzori Expedition belong to this race.

Halcyon pallidiventris ogilviei Grant is a bird with *a darker brown belly* and probably belongs to the southern species.

Kendu Bay south of Speke's Gulf and South Ankole in Uganda.

447. **Halcyon senegalensis senegalensis** Linn. **Grey-headed Blue-backed Kingfisher.**

Three birds from Bale, Burumezi in Uganda, and Kisumu in East Africa are inseparable from Senegal examples.

448. **Halcyon cyanoleuca** Vieill. **Blue-headed Blue-backed Kingfisher.**

I prefer not to treat this bird as a subspecies of *H. senegalensis* as it appears to occupy so much of the same territory together with the latter. I should imagine that the birds which look like hybrids are merely highly coloured *H. senegalensis*, for even amongst Senegal birds one finds a few with quite bluish green heads. The black stripe going through the eye in *H. cyanoleuca* distinguishes such birds from this species.

Sezibwa River, Uganda.

449. **Halcyon senegaloides** A. Smith. **Red-billed Grey-breasted Kingfisher.**

Has been obtained at Mombasa.

450. **Halcyon malimbicus prenticei** Mearns. **Black-backed Blue Kingfisher.**

Type locality, Sesse Islands. A good race, having the head much less blue than in *H. m. malimbicus*.

Sezibwa River, Uganda.

451. **Halcyon badia budongoensis** van Someren. **Uganda Brown-backed Kingfisher.**

Bull. B.O. Club, November 1919.

This bird and three others in the Tring Museum from Uganda and Ituri Forest are much bigger than typical *H. badia badia*, from Gaboon. They are also paler, the blue of the rump darker, but not so wide. Bill larger. Wings 100–105 mm. as compared to 90–98 in *H. badia badia*.

West Uganda to Belgian Congo ; Budongo and Bugoma Forests in Uganda. Type ♀, Budongo, 27.xii.1918.

452. **Alcedo semitorquata** Swains. **Black-billed Blue and Brown Kingfisher.**

Not common in East Africa, but occasionally obtained. Frequents the Kilimanjaro area.

453. **Alcedo güntheri** Sharpe. **Günther's Blue and Brown Kingfisher.**

This bird has been obtained in the forest north of Entebbe by C. F. Belcher.

454. **Ispidina picta** Bodd. **Violet-eared Little Kingfisher.**

A Bugoma specimen is a variety, having the back light blue, not dark blue as in normal birds.

Fort Hall and Kisumu in East Africa; Lugalambo, Bugoma, and Entebbe.

455. **Myioceyx ruficeps ugandae** van Someren. **Little Red-headed Kingfisher.**

Bull. B.O. Club, xli. p. 105, 1921.

These birds have more decided blue spots on the head than Gaboon and Fantee specimens.

Lugalambo, Mabira, and Budongo in Uganda. Type ♂, Budongo, 1.vi.1919. Tring Museum.

456. **Corythornis cristatus** Pall. **Little Crested Kingfisher.**

Kisumu, Kibos, Nairobi, in East Africa; Entebbe in Uganda.

457. **Ceryle maxima** Pall. **Eastern Giant Kingfisher.**

A ♂ bird was shot by a small pool which had formed in a disused quarry, a most unusual locality.

Nairobi, 4.i.1917.

458. **Ceryle rudis rudis** Lin. **Pied Kingfisher.**

♂ ♀, Kisumu.

459. **Melittophagus revoili** Oust. **Little Buff-breasted Blue Bee-eater.**

Insufficient material prevents me from ascertaining whether these are the same as typical birds, but they probably are.

Northern Guasso N'yiro. Only two obtained.

460. **Melittophagus lafresnayii oreobates** Sharpe. **Large Brown-breasted Yellow-throated Bee-eater.**

It is a pity the type locality, Elgon, is so far north, because birds from the Turkwell are sometimes very like the Abyssinian birds, having the blue forehead and supercilium and the blue neck-patch.

Nairobi, Kyambu, Kisumu, Marakwet, Elgon, and Turkwell River.

461. **Melittophagus variegatus loringi** Mearns. **Uganda White-cheeked Yellow-throated Bee-eater.**

The Uganda race of *M. variegatus* can be recognised, differing from the western bird in having a distinct blue forehead and supercilium.

Budongo, Bugoma, Masindi, Mubendi, Entebbe, and Jinja in Uganda; Kisumu in East Africa.

462. **Melittophagus pusillus cyanostictus** Cab. **Little Blue-eyebrowed Bee-eater.**

(*M. p. sharpei* Hart.)

All my twenty-five birds have blue foreheads and superciliary stripes. The distribution of this race and the next is such that they run parallel for part of their distribution. In the Kisumu and East Uganda–Turkwell districts they interbreed.

Mombasa, Changamwe, Lamu, Maungu, Tsavo, M'buyuni, Voi, Simba, Nairobi, Fort Hall, Kibos, Kisumu, Kibingei, Turkwell River.

463. **Melittophagus pusillus meridionalis** Sharpe. **Southern Little Bee-eater.**

These birds have a small pale blue patch over the eye. From South Africa they range to North Abyssinia *via* the lake districts. Some of the birds taken in East Africa are intermediate.

Masindi, Busiro, Kyetume, Sezibwa, in Uganda; Kendu Bay, Kisumu, Kibengei, and Elgon in East Africa.

464. **Melittophagus mülleri yalensis** van Som. **Uganda Red-throated Blue Bee-eater.**

Bull. B.O. Club, xl. p. 26, 1919.

This is a pale form of *M. mülleri mülleri* (from Gaboon), having the back lighter chestnut and the blue of the underside not so deep.

North Kavirondo, Elgon, and Kakamegoes.

465. **Melittophagus bullocki frenatus** Hartl. **Red-throated Green Bee-eater.**

Ranges into the north-west corner of Uganda as far south as Masindi.

466. **Melittophagus bullockoides** Smith. **White-headed Red-throated Bee-eater.**

Nakuru, Naivasha, Kisumu, Turkwell River.

467. **Dicrocercus hirundineus hirundineus** Licht. **Fork-tailed Bee-eater.**

Specimens from Vanga undoubtedly belong to the southern race.

468. **Dicrocercus hirundineus heuglini** Neum. **Blue-vented Fork-tailed Bee-eater.**

A ♂, January, belongs to the northern form, which, if the Abyssinian birds are a valid race, under the name of *D. h. omoensis*, would probably have to be so named.

Mt. Moroto, Turkana.

469. **Merops apiaster apiaster** Linn. **European Bee-eater.**

This is a common species on migration.
Kikuyu, Kyambu, Kitui, Tsavo.

470. **Merops albicollis maior** Parrot. **East African White-throated Long-tailed Bee-eater.**

Type locality, Bagamoyo. Length of wings, 100–108 mm. The longest tail 220 mm.

Masindi, Bugoma, Budongo, Busiro, Singo, in Uganda; Kisumu, Kendu Bay, Rudolf, N'zoia River, in East Africa.

471. **Merops nubicus nubicus** Gm. **Crimson Long-tailed Bee-eater.**

Tsavo and Mombasa.

472. **Merops persicus persicus** Pall. **Yellow-throated Green Long-tailed Bee-eater.**

Two birds have tails with the central feathers 70 mm. beyond the rest and as long and as graduated as the North-west African birds, *M. p. chrysocercus*. It is quite possible that the north-west race (the eastern extension of breeding range is perhaps not known) migrates to West Uganda and that these birds belong to it.

Masindi, Entebbe, in Uganda; Kisumu, Kobua, Lake Rudolf, and Nairobi.

473. **Merops superciliosus** Linn. **Brown-throated Long-tailed Bee-eater.**

Masindi, Mubendi, in Uganda; Kisumu, Simba, and Tsavo in East Africa.

474. **Upupa epops epops** Linn. **European Hoopoe.**

Two specimens belong undoubtedly to the European form. Dr. Hartert confirms this identification. Two other birds were obtained by local ornithologists.

Kyambu and Naivasha.

475. **Upupa epops somalensis** Salvad. **Somali Hoopoe.**

This race can be distinguished from the European bird by having more rufous on the mantle and the breast, and by having no white band on the crest before the black tips. It has the white band on the primaries, thus distinguishing it from *U. epops africana*.

Nairobi in East Africa; Singo in Uganda.

476. **Upupa epops africana** Bechst. **African Hoopoe.**

This race is resident in East Africa throughout the year and breeds regularly in suitable localities. Much variation exists in the coloration. Young males are much richer in coloration than young females. It is particularly common in the dry thorn-bush country.

Kisumu, Nairobi, Simba, Tsavo, M'buyuni, Lake Jipe.

(C. Grant's review of the genus *Irrisor* in the *Ibis*, 1915, simplifies the division of these birds into races. In the main he is correct; but my series shows that certain modifications will have to be made in the matter of distribution.)

477. **Irrisor erythrorhynchus marwitzi** Rchw. **Green Red-billed Wood Hoopoe.**

An old male collected at Kibos has several white feathers on the head and throat, but is not *I. jacksoni*! One female has the primary coverts uniform green, not tipped white, as is usually the case. Two young birds have these coverts entirely white. A female shot with the nestlings, 23.vii.1918, has the culmen and the whole of the lower bill black, but is not a specimen of *I. d. granti*. It is perfectly adult.

Mubango, Lugalambo, Elgon, Kimiriri River, in Uganda; Nairobi, Kisumu, Burnt Forest, Marakwet, Simba, Tsavo, and Changamwe in East Africa.

478. **Irrisor erythrorhynchus niloticus** Neum. **Blue-tailed Red billed Wood Hoopoe.**

All my five birds have heads and throats and breasts with bluish gloss, and blue tails without any purplish tinge, or just a shade of purple at the base of the central rectrices. They have much larger and longer bills than *I. e. marwitzi*.

Mt. Moroto, Kabua River, Rudolf, and Turkwell River.

479. **Irrisor damarensis granti** Neum. **Purple-headed Red-billed Wood Hoopoe.**

Although the majority of adults have black-and-red bills, nevertheless, very *old birds* have bright *red* bills.

Simba, Kitui, Tsavo, Samburu, and Lake Jipe.

480. **Irrisor somaliensis** Grant. **Black-billed Wood Hoopoe.**

♂, December 1912 (A. B. Percival coll.).

Occurs on the Juba River.

481. **Irrisor bollei jacksoni** Sharpe. **White-headed Red-billed Wood Hoopoe.**

There are three groups which may turn out to be recognisable races of this species. I append measurements of bills and wings and other characters, including the series in the Tring Museum.

SERIES I.: 11 ♂ 6 ♀. Wings, ♂ 125–131, ♀ 123–127 mm. Bills, *from nostril* to tip, ♂ 26–38 mm. Head and mantle on the average bluer than in Kikuyu birds. Heads purer white.

Elgon, Mabira, Bumasifa, Mubango, Bugoma, in Uganda.

SERIES II.: 5 ♂ 2 ♀. Wings, 130–145 mm. Bills, from nostril to tip, ♂ 35–41, ♀ 27–37 mm.

These are typical *I. b. jacksoni*. General colour of head and mantle more golden green.

Kyambu, Molo, Escarpment, Kenia.

SERIES III.: 7 ♂ 4 ♀. Wings, 120–135 mm. Bills, from nostril to tip, ♂ 27–37, ♀ 25–27 mm.

Males with distinct bluish wash on head and mantle; only two birds with white heads as in Kikuyu birds, though less extensive on the throat. The others

have the white limited to the forehead and a few feathers on the throat; some have altogether green heads. They are all adult. Apparently a small mountain race, showing a strong tendency to loss of white feathers on the head. I refrain from naming this race, as I find a bird in the Tring Museum, collected at Escarpment Station, with uniform green head; it, however, is long-billed. A larger series from the Sherengani is required.

North end of Elgeyu Escarpment, 8,000 feet, Sherengani Hills.

482. **Scoptelus aterrimus emini** Neum. **Uganda Black Wood Hoopoe.**

♂, 17.vi.1916. This bird has no white on the tail-feathers, and is not so large as the type of *S. a. maior* Neum. which I have examined. Wing, 101 mm. In *S. maior* the wings are 112 mm.

Bukedi in Uganda.

483. **Scoptelus pallidiceps** van Someren. **Pale-headed Wood Hoopoe.**

Bull. B.O. Club, 1915.

I described this bird on the evidence of eight males and females. Since then I have collected four more birds, and these bear out the characters given for this species. Wings, 90–105 mm.

This bird has a darker, more brownish head and greener belly than *S. adolfi-friedrici* Reichw. from Belgian Congo.

Lugalambo, Mubango, Elgon.

484. **Rhinopomastus cyanomelas schalowi** Neum. **Black Scimitar-billed Wood Hoopoe.**

The inner primary coverts are white in the majority of specimens, but in some uniform bluish. One old male from Lamu has not only all the primary, but also all the secondary coverts pure white. It is probably an aberration.

Lamu, Manda, Changamwe, Sagala, Simba, Nairobi, Naivasha, Elgeyu.

485. **Rhinopomastus cabanisi** Filippi. **Yellow-billed Scimitar-billed Wood Hoopoe.**

One male has a white bar on the fourth primary of the right wing, indicating close relationship to *R. minor*.

As I have no birds from near the type locality I cannot compare my specimens, but from the measurements given by Reichenow it would seem that my birds are larger: wings, 108–112 mm.

Mt. Moroto and Kobua River in Uganda; Kisumu, Kerio River, Kendu Bay, Tsavo, Voi, M'buyuni, Campi-ya-bibi, and Maungu in East Africa.

486. **Caprimulgus europaeus europaeus** Linn. **European Nightjar.**

I saw a bird of this species as late as April 24th in my garden at Nairobi.

487. **Caprimulgus europaeus meridionalis** Hart. **Mediterranean Nightjar.**

♀, 29.iii.1917, Nairobi. This bird agrees perfectly with the type. Identification confirmed by Dr. Hartert.

488. **Caprimulgus europaeus unwini** Hume. **Unwin's Nightjar.**

♀, 31.iii.1918; ♂, 12.iv.1917. Very pale birds with silvery backs and pale undersurfaces with clear bars. Dr. Hartert has verified my identification. These migratory Nightjars roost in trees more frequently than do the local species.

Tsavo and Mombasa.

489. **Caprimulgus fraenatus** Salvad. **Salvadori's Nightjar.**

Young birds are very like *C. inornatus*, but more rufous on the back, and the spotting is larger. A common species in suitable localities. Wings measure 165–175 mm.; average length, 170 mm.

Kisumu, Nakuru, Nairobi, Fort Hall, Simba.

490. **Caprimulgus keniensis** van Someren. **Kenia Nightjar.**

Bull. B.O. Club, November 1919.

♂ ad., April 1919 (A. B. Percival coll.), type!

Superficially resembles *C. fraenatus*, but very dark with much bigger and more numerous dark buffy tips to the wing-coverts on an almost black ground, the vermiculations almost invisible. The longitudinal pale markings on the scapulars are golden buff on blackish ground. The inner webs of the upper scapulars have a silvery tinge contrasting with the rest of the black plumage. The shafts of the primaries are white for a part of the length of the white spots and about 30 mm. beyond; the white in the outermost primary does not extend to outer web. The breast is blackish with rusty buff spots. Throat with two white patches.

Northern Uasso N'yiro.

491. **Caprimulgus nigriscapularis** Rchw. **Black-winged Nightjar.**

This is not a common species in East Africa, but more frequently met with in Uganda.

♂ ♀. Nairobi, Entebbe, in Uganda.

492. **Caprimulgus inornatus** Heugl. **Plain-backed Nightjar.**

There appear to be two extreme types of coloration in this species, grey and rusty brown. Intermediate colours are common. The young of *C. fossei* in first plumage are very like the greyish form, but can be recognised by the outer web of the outer tail-feather being whitish, not white tipped as in *C. inornatus*.

Taveta and Kisumu in East Africa; Lugalambo in Uganda.

493. **Caprimulgus trimaculata tristigma** Rüpp. **Black Nightjar.**

♂ ♀, 7.viii.1917. These birds have wings of 174–175 mm. respectively. It is not a common species, and appears to frequent rocky hillsides in preference to plains.

Fort Hall, Kenia Province.

494. **Caprimulgus nubicus taruensis** van Someren. **Taru Desert Nightjar.**

Bull. B.O. Club, xl. p. 25, November 1919.

The coloration of the specimens is similar. Not rare in the desert thornbush country, yet not common. More rufous than *C. nubicus torridus*, and smaller. Wings 43–51, as compared with 52–58 mm.

Tsavo and M'buyuni. 3 ♂ 2 ♀, type, 17.iii.1918.

495. **Caprimulgus donaldsoni** Sharpe. **Little Desert Nightjar.**

My series shows a great range of coloration, from bright chestnut to pale greyish. It is a most beautiful sight to see these birds sitting on an open bit of ground with the sun shining on them, the yellow markings glistening like gold. When I visited Tsavo I saw no less than forty of these beautiful little birds! They were nesting in the district at the time.

M'buyuni, Tsavo, and Taveta.

496. **Caprimulgus poliocephalus poliocephalus** Rüpp. **White-tailed Nightjar.**

After comparing my series and the birds in Tring, I have been compelled to recognise two races: the typical bird ranging from Abyssinia to North Kenya Colony, and a southern darker race inhabiting the Kilimanjaro district to Nairobi and Kenia. The latter must bear the name *C. p. palmquisti* Sjöstedt. In both the northern and the southern race, birds occur which have no white on the throat! Thus one of the characters claimed for Sjöstedt's form does not hold good.

Kyetume in Uganda; Kisumu, Elgeyu, Eldoret, Nakuru, in East Africa.

497. **Caprimulgus poliocephalus palmquisti** Sjöstedt. **Kilimanjaro White-tailed Nightjar.**

Differs from the northern race by being slightly larger and darker, and showing a strong tendency to lose the white on the throat. Two of my birds agree perfectly with the figure of this bird, allowing, of course, for slight faults due to colour reproduction. The amount of black on the outer penultimate pair of feathers of the tail varies. In some birds the second outer feather is pure white, in others it is edged with sandy or even brownish black.

Taveta and Simba.

498. **Caprimulgus natalensis chadensis** Alexander. **Spotted Golden Nightjar.**

Eight birds belong to the northern race. One is just as fulvous as a specimen from Angola. It is not stained, but a beautiful clean specimen. The wings vary from 150 to 155 mm.

Mubendi and Kyetume in Uganda; Eldoret in East Africa.

Caprimulgus fossei and supposed races.

I have gone carefully into the supposed races of this bird and have arrived at the conclusion that *C. clarus* and *apatelius* are in reality a distinct species.

First of all, throughout a large part of the range of *C. fossei fossei* the form *clarus* occurs as a breeding species, though elsewhere *C. clarus* is found where *C.*

fossei fossei is unknown. Now, as regards the supposed character of elongation of central tail-feathers and graduation of the others in *C. fossei*, I find that this is not a marked feature and *not any more emphasised than in C. europaeus. But* in *C. clarus* and *C. apatelius* the graduation *is marked*, the average length of the central rectrices over the outermost being 30 and in some as much as 50 mm.

I am therefore compelled to treat *C. fossei* as a species with a small race in Mozambique ranging into Tanganyika Territory, and also to treat *C. clarus* as a species or parent race with one subspecies, *C. c. apatelius*, and would suggest that possibly "*Scotornis climacurus*" should not be kept in a distinct genus, but united with *Caprimulgus*. The body marking in *Scotornis* is no different in pattern from that of *C. clarus*, and the bird differs only in the exaggerated elongation and graduation of the tail. I have compared a large series in coming to these conclusions. Lord Rothschild concurs in my opinion. I thus treat my birds as follows :—

499. **C. fossei fossei** Hartl. **Gaboon Nightjar.**

These birds are large and dark and have the *tail not graduated*. Wings 160–162 (in Gaboon and Angolan birds 155–165 mm.). These large birds range from Gaboon to Uganda and Angola and thence to Transvaal.

Unyoro, Duro River, Kampala, in Uganda; Kisumu and Kenia in East Africa.

500. **C. fossei mosambiquus** Hartl. **Mozambique Nightjar.**

Rather more boldly marked than *C. fossei fossei* and darker, besides being smaller. Wings, 145–152 mm. Range: Mozambique to Central Tanganyika Territory (Lumbo, Morogoro).

501. **Caprimulgus clarus clarus** Reichw. **Little Pale Nightjar.**

This form cannot be a subspecies of *C. fossei*, as they occur together throughout Uganda and East Africa. My series of adult birds has been collected practically throughout the year. One of the characters of the "*clarus*" group is the marked elongation of the central tail-feathers and graduation of the rest towards the outer ones, the central ones projecting about 50 mm. beyond the outer ones. Smaller than *C. fossei*. It is much paler, more greyish on the back, with golden or sandy markings. The wing measurements of a large series of adults are 135–150 mm.

Of *C. clarus* there is one subspecies, *C. c. apatelius* Neum., South Ethiopia. It is larger than *C. clarus*, rather more greyish, and has the same elongated tail-feathers. The wings measure 147–162 mm. The character on which Neumann separated this bird from *C. fossei* and *C. clarus*, viz. the white wing-spot extending over both webs in all the primaries, does not hold good in *all* South Ethiopian birds, and it is found in specimens of true *C. fossei*, *C. clarus clarus*, and *Scotornis climacurus*. I have maintained Neumann's name for the South Ethiopian race, because it is larger, not because of the character of the wing-spot. Records of *C. clarus apatelius* from Kilimanjaro and Taveta should be referred to *C. clarus clarus*!

Lamu, Manda, Mombasa, Manugu, Voi, Taveta, Nairobi, Kyambu, Kisumu, in East Africa; Jinja, Kampala, Bugoma, in Uganda.

502. **Scotornis climacurus** Vieill. **Long-tailed Nightjar.**

The variation in this species is enormous, from black and deep chestnut to fulvous and greyish.

Masindi, Unyoro.

503. **Macrodypteryx longipennis** Shaw. **Racquet-winged Nightjar.**

In February males are in the non-breeding plumage, lacking the long wing-plumes.

Kisumu. Not common.

504. **Macrodypteryx vexillarius** Gd. **Standard-winged Nightjar.**

One male has white plumes, the other greyish, while the third has them white at the basal half and grey for the rest. A ♂ in August was shot high up in the air, catching flying white ants.

Kisumu, Kendu Bay, in East Africa; Mubendi in Uganda.

505. **Apus apus apus** Linn. **European Black Swift.**

♂, 7.iii.1917, Nakuru. This specimen has a wing of 175 mm. and is no doubt an example of *Apus apus*. It lacks the dark bluish mantle of the next species.

506. **Apus roehli** Rchw. **Blue-backed Black Swift.**

This race is very much like the European bird, but can be recognised by having the head and rump blackish brown and the mantle glossy blue-black. In size it is very little smaller, having wings of 161–175 mm. It is a resident breeding bird in East Africa and nests in the cliffs at Longonot, Naivasha, and Nakuru Lake.

507. **Apus shelleyi** Salvad. **Shelley's Brown Swift.**

2 ♂ 1 ♀, November, December, show no wear. This is a small brownish bird with greenish gloss, which is very much like *Apus apus pekinensis*, but much smaller. I have found it breeding at Nakuru in some crevices of a cliff side and obtained the eggs. As a nesting bird it ranges from Abyssinia to British East Africa. It nests alongside a black swift which I describe later.

Naivasha and Nakuru.

508. **Apus nakuruensis** van Someren. **Nakuru Swift.**

♂, 14.v.1917, type. I had noticed that from the same cliff issued three distinct swifts—one a brownish bird, *A. shelleyi*, the second a large white-rumped species, and a blackish one. On obtaining specimens, I found them to belong to distinct species. As *Apus shelleyi* has been admitted a subspecies of *Apus apus*, we cannot recognise these blackish birds also as a subspecies of *Apus apus*, though they are nearer to *Apus apus* than to *A.* "*pekinensis*." These birds differ from *Apus shelleyi* in being altogether blacker above and below and from *Apus apus rhoeli* in lacking the deep bluish gloss to the mantle, which is glossy black, and in being smaller; wings 150–159 as compared with 161–175 mm. They are also distinct from *Apus niansae* of Reichenow.

To my knowledge the following birds nest together or in close proximity: *A. shelleyi*, *A. roehli* and *A. nakuruensis*, *A. horus* and *A. streubeli!* The latter two, of course, have white rumps, and do not come into the *Apus apus* group.

I would suggest that *Apus pekinensis* should be raised to specific rank and *Apus shelleyi* admitted as a subspecies of this parent race. The dark Swift which I have described would be a race of *Apus apus apus*, as it resembles this bird in appearance, and is merely smaller,

Nakuru, Naivasha, Kisumu.

509. **Apus pekinensis** Swinhoe. **Pekin Swift.**

Is a regular migrant to East Africa and has been obtained in Uganda.

510. **Apus aequatorialis** Müll. **Giant Black Swift.**

A. reichenowi Neumann.

I have no doubt that *Apus reichenowi* of Neumann is identical with this species, the character given, viz. the uniform undersurface, being sometimes seen in old birds, and one of my specimens is uniform brownish for more than half the underside and faintly barred over the lower abdomen. Added to this is the fact that this single specimen was obtained from a flock of typical birds. The Nyassaland birds should be kept as a race under the name *A. aequatoralis alfredi* Shelley.

Nairobi, Kyambu, Naivasha.

(*Apus schubotzi* Rchw. from Ruwenzori has been compared by Hartert, who says that it is not different from *aequatorialis*.)

511. **Apus niansae** Rchw. (**A. kittenbergeri** Mad.).

These two names would appear to be synonymous, the older name being *A. niansae*. These birds have been taken in the Bukoba district and at Buddu.

512. **Apus murinus** subsp. ?

Similar in colour to *A. murinus murinus*, but rather smaller. Occurs in East Africa, probably as a migrant. A similar bird is found in Somaliland. (Archer's collection from North Somaliland.)

513. **Apus affinis** Gray. **Square-tailed White-rumped Swift.**

Three Mombasa specimens have black shafts to the feathers of the throat. Wings, 128–130 mm.

Mombasa and Makindu.

514. **Apus horus** Heugl. **Large White-rumped Swift.**

2 ♂, July and August. The August bird is not typical, being paler on the head and underside and being more purply blue on the back. The white on the rump is less extensive and the white area on the throat wider than in typical Abyssinian birds.

Lakes Nakuru and Naivasha.

515. **Apus caffer streubeli** Hartl. **Fork-tailed White-rumped Swift.**

A common species in East Africa and Uganda.

Lake Nakuru, Nairobi, Kisumu, Fort Hall, and Entebbe.

516. **Tachornis parvus myochrous** Rchw. **East African Palm Swift.**

Some of these birds have grey throats, others white with blackish streaks.

Mombasa and Tsavo ; Entebbe in Uganda.

Nesting habits of Swifts :—

Apus shelleyi : Nests in holes and crevices in cliffs, sometimes adding no material to the hole or at others using mud to enclose a small area. Lining of nest varies : occasionally straw, feathers (seldom), and sometimes small bones from bats which inhabit these cliffs. Eggs, one or two.

Apus nakuruensis : As above. Eggs, two.

Apus roehli : As above. Eggs, two.

Apus aequatoralis : All nests of this bird seen have been out of reach, situated in high cliffs.

Apus affinis : Nests constructed entirely of mud or mud and straws, complete or in apertures in walls of dwelling-houses, or in spaces between heads of pillars and roofs. Lined with feathers and straws. Eggs, two.

Apus horus : Not examined.

Apus streubeli : Utilises old or unfinished nests of swallows with tubular entrances. It lines with straws and feathers if the nest be unlined. It also nests in nests of other swifts. Eggs, two.

Tachornis parvus myochorus : Constructs nests to palm leaves, using feathers and cobwebs which are stuck together with saliva. Eggs, two, glued to the bottom of the nest.

517. **Riparia riparia fuscocollaris** Tschusi. **Little Black-collared Sand Martin.**

When my series is compared with typical birds from Sweden or Britain, it is at once apparent that they are darker ; especially is this the case in the blackish breast band. They agree well with birds from Turkestan and are probably migrants from that country. There are autumn and spring birds, and all are alike dark.

Kisumu, Kibigori, Naivasha, Nairobi, Nakuru. January, March, April, October, December. 12 ♂ ♀. These birds are evidently Tschusi's *fuscocollaris* (*Orn. Jahrb.* xxiii. p. 216, 1912, from migrants in Dalmatia).

518. **Riparia riparia riparia** Linn.

7 ♂ ♀ from Kisumu and Nairobi I consider to be typical *riparia*.

519. **Riparia paludicola ducis** Rchw. **Little Sooty Sand Martin.**

Riparia ducis Reichenow, 1908.

Riparia paludicola dohertyi Hartert, 1910 (Kikuyu Escarpment—not Mau !).

These birds are much darker than *R. p. minor*. Full-plumaged birds are almost blackish above, especially birds from 8,000 feet upwards. Hartert has compared the type of *R. p. ducis* Rchw. and found it identical with his *dohertyi*.

Nairobi, Kikuyu, Kisumu, Nakuru, Naivasha, Elgeyu, Lake Narasha. 6 ♂, 3 ♀, 2 juv., January, July, August, September, October.

520. **Riparia cincta suahelica** subsp. nov. **Large Black-collared Sand Martin.**

Separable from South African and Angola birds by being much darker above and having a darker, more blackish breast band. Wings, 120–140 mm.

East Africa and Uganda. Eleven specimens. Type ♂, Escarpment, 1901, W. Doherty leg., Tring Museum.

521. **Riparia fuligula rufigula** Fisch. & Rchw. **Brown-throated Rock Martin.**

The birds from Angola are very much more rusty on the throat and should be kept separate as a distinct race. They differ also in having the spots on the tail smaller, and are generally smaller.

Nakuru, Naivasha, Kisumu, Kyambu, Nairobi.

522. **Hirundo griseopyga** Sund. **Grey-rumped Swallow.**

East African specimens have much whiter rumps than the few birds available from the type locality. The tails are longer and more graduated. It is possible that the East African birds are separable as a southern race, but more material is necessary before a decision can be arrived at.

Kisumu, Nakuru, Naivasha, and Nairobi.

523. **Hirundo aethiopica** Blanf. **Red-fronted Swallow.**

As I have no birds from the type locality I cannot say whether my specimens are quite typical.

Mombasa, Tsavo.

524. **Hirundo angolensis arcticincta** Sharpe. **Eastern Red-faced Swallow.**

Some of my birds are very close to the typical race, but on the whole these Eastern birds are larger and more whitish below.

Masindi, Entebbe, and Jinja in Uganda; Elgon, Kisumu, Nakuru, Naivasha, and Escarpment in East Africa.

525. **Hirundo rustica rustica** Linn. **European Swallow.**

Some of these birds are very rufous on the underside and others are very white. Young January birds are, of course, much more advanced than August ones, the former being in the first winter plumage, the latter still in the nest plumage. The moult of this bird appears to be a regular irregularity, that is, the feathers are moulted in pairs; but in my series no two birds taken in the same month are in the same stage of moult nor are the feathers which have been shed always a similar pair. Freshly moulted birds are darker.

Kendu Bay, Kisumu, Nakuru, Naivasha, Nairobi.

526. **Hirundo smithii smithii** Leach. **Wire-tailed Swallow.**

My series is uniform in having paler brown heads than Angolan specimens. Series of fresh birds should be compared.

Entebbe, Uganda; Kisumu, Nakuru, Nairobi, Tsavo, and Simba.

527. **Hirundo puella abyssinica** Guér. **Northern Striped-breasted Swallow.**

I cannot agree with Sclater and Praed (*Ibis*, 1918) that the East African and East Uganda are the same as the South African birds. To say that the Uganda and East African birds are heavily spotted and streaked, "having as much black as white," is not correct. My birds agree with the Abyssinian race. Wings, 105–110 mm. It is noticeable, however, that West Uganda birds from about Entebbe to Lake Edward, Bukoba, and Lake Kivu are heavily streaked, and these may be similar to *H. p. unitatis* Scl.

Pale race: W. Rudolf, Kisumu, Nairobi, Archer's Post, Kenia.

Dark race: Entebbe, Masindi, Bukoba.

528. **Hirundo senegalensis senegalensis** Linn. **Large Brown-breasted Swallow.**

I have made a careful examination of these birds, and I find that they remain true to type until they reach the eastern boundary of Uganda and North British East Africa. Here they meet with a race which shows characters of both *H. senegalensis* and *H. monteiri*. As I find that birds with the white spots on the tail, as in "*monteiri*," but with paler breasts, are confined for the most part to Tanganyika Territory and southern British East Africa, while true *H. senegalensis* does not appear to occur in these parts, I have been compelled to place these intermediates under a new name, as follows later.

The wings measure 143–155 mm. in *H. senegalensis*. I have five typical birds from Senegal and twenty from countries between Senegal and Uganda. These birds show no indication of spots on the tail.

Senegal to Abyssinia, Uganda, and North British East Africa (Masindi, Unyoro, Kyetume, Kavirondo, Kisumu).

529. **Hirundo senegalensis hybrida** van Someren. **Spotted-tailed Brown-breasted Swallow.**

Bull. B.O. Club, xli. p. 104, 1921.

East African specimens hitherto referred to *H. monteiri* are not true *monteiri*, but much paler below. True *H. monteiri* is a dark bird. Further, they show characters of both *H. senegalensis* and *H. monteiri*. If these birds were found only where *H. senegalensis* and *monteiri* meet, there would be no need for a name, but they are widespread in the distribution given. It is therefore impossible to recognise these birds as *H. monteiri*, and as it is a common bird in East Africa I have given them a name. Besides my birds I have examined a series of ten in Tring Museum and a number in Nairobi.

Tanganyika Territory and Kenia Colony to south of Lake Victoria, where it meets *H. senegalensis* (Mombasa, Changamwe, Tsavo, M'buyuni, Samburu, Nairobi).

530. **Hirundo gordoni neumanni** Rchw. **Massai Long-tailed Brown-breasted Swallow.**

There is no doubt that *H. neumanni* is a race of *H. gordoni*, and that the latter is not a subspecies of *H. semirufa*; *semirufa* and *gordoni* occur side by side in Angola. Further, the scheme of colouring is different. All

Uganda birds would be *H. g. neumanni*, not *H. gordoni*, as they are darker below than *H. gordoni*, and larger.

The specimens of *H. semirufa* from Kivu and Belgian Congo are probably a race of the southern bird.

Kisumu, in East Africa; Masindi and Entebbe in Uganda. (It is possible that the birds from Angola will have to be recognised as a race of *H. gordoni*, as they are larger than typical birds, and somewhat darker. Material at present insufficient to decide.)

531. **Hirundo melanocrissa emini** Rchw. **Black-vented Swallow.**

The female has the throat and breast distinctly streaked.

Nairobi, Kendu Bay.

532. **Hirundo atrocoerulea christyi** Sharpe. **Black Wire-tailed Swallow.**

This race is so very near the South African race as to be hardly distinguishable.

Nambigirwa, Uganda.

533. **Delichon urbica urbica** Linn. **European House Martin.**

Hartert states in *Vögel pal. Fauna* that the wings of this species measure 108–114, while a specimen from Turkestan has a wing of 115 mm. In my series is a bird with a wing of 117 mm. !

Naivasha and Nakuru Lake.

534. **Psalidoprocne albiceps** Scl. **White-headed Martin.**

Very common in the Kisumu scrub.

Entebbe and Bugoma in Uganda; Kisumu, Nakuru, Nairobi, Fort Hall.

535. **Psalidoprocne holomelaena massaica** Neum. **Black Rough-winged Martin.**

Kyambu, Fort Hall, Nakuru, Elgon.

Note.—It appears to me that the present division of the Swallows and Martins into genera is not satisfactory. I am unable to go into the matter fully, but would like to draw attention to the nesting habits of the several species which nest in East Africa and Uganda.

Riparia paludicolor dohertyi: Nests in holes in banks, natural or excavated by the bird, or occasionally in a mere depression under an overhanging tuft of grass growing on an embankment. Nest lined with grasses. Eggs white.

Riparia cincta: Nests in holes in banks. Nest lined with grass. Eggs white.

Riparia fuligula rufigula: Builds a "*half-cup*" nest of *mud*—mixed with grass—lined with grass and feathers. Eggs pale pink to white spotted with reddish or liver. Nest built in caves on cliffs and houses.

Hirundo griseopyga: Nests in tunnels in banks, natural or excavated by bird; little or no lining of grass. Eggs white.

Hirundo aethiopica: Builds a "half-cup" mud nest placed in caves or houses; nest lined grass and feathers, sometimes string and paper. Eggs white to pinkish, spotted liver and reddish.

Hirundo arcticincta : Similar to above.

Hirundo smithi : Ditto to above.

Hirundo puella abyssinica : Makes a mud nest with a half tubular entrance ; lining grasses and feathers. Placed in houses, culverts, caves, and cliffs. Eggs white.

Hirundo senegalensis : Ditto, ditto.

Hirundo senegalensis hybrida : Ditto, ditto.

Hirundo gordoni neumanni : Ditto, ditto.

Hirundo melanocrissa emini : Ditto, ditto

Hirundo atrocoerulea christyi : Ditto, ditto.

Psalidoprocne albiceps : Nests in holes in banks, usually natural ones adapted by bird, lined with grass and a feather or two. Eggs white.

Psalidoprocne holomelana massaica : Nests in holes in banks, natural or excavated by bird ; nest substantial, constructed of " beard lichen " and grass. Eggs white.

536. **Melaenornis lugubris ugandae** subsp. nov. **Uganda Black Flycatcher.**

Differs from the Abyssinian race (*schistacea*, not *pammelaina* Stanley) in being much more glossy black, especially the males, and in having the inner webs of the primaries and secondaries greyish ashy, not whitish, and from *M. p. edoloides* in lacking the bluish-black gloss, in being smaller, and having shorter tails and wings.

Masindi, Budongo, Entebbe, Sezibwa, in Uganda ; Kisumu and Kavirondo in East Africa.

I have examined the type of *pammelaina* Stanley, which is a *blue-black bird* of the *ater* group. The next name for the grey-black birds is *M. lugubris lugubris*, North Abyssinia. Dull grey-black ; bases to inner web of quills white. Wings, 90–103 mm.

The recognisable races are :—

M. l. schistacea Sharpe : S. Ethiopia, Somaliland. Grey-black. 90–104 mm. Wings inside whitish.

M. l. ugandae : Uganda and Kavirondo. Glossy black ; wings, inner webs greyish ashy.

M. l. edoloides : Senegal. Larger, wing 95–108 mm. Dark blue-black ; inner webs of wing feathers dark ashy.

537. **Melaenornis ater pammelaina** Stanley. **Blue-black Flycatcher.**

(= *tropicalis* Cab.)

An exeellent race of the South African bird, but the name will probably have to be altered to *pammelaina* Stanley, as the type of this is a blue-black bird which agrees absolutely with *tropicalis*, and probably did not come from Abyssinia. As *pammelaina* has priority, this name will have to be used.

Simba, Tsavo, Nairobi, Fort Hall, Teita.

538. **Empidornis semipartitus kavirondensis** Neum. **Grey and Brown Flycatcher.**

As I have no birds from the type locality of *E. semipartitus* I am unable to verify this race. Wings, 90–100 mm.

Birds from Gondokoro and Nile east to Rudolf and Soroti are 95, 98, 100 mm.

Kendu Bay, Kisumu, Kachiliba, Baringo, in East Africa; Soroti and Lali in Uganda.

539. **Dioptrornis toroensis** Hart. **Toro Grey Flycatcher.**

Very like *D. fischeri*, but lacking the white ring round eye.

Found in South-west Uganda, Kigezi, South Ankole.

540. **Dioptrornis fischeri** Rchw. **White-eyed Grey Flycatcher.**

Mporogoma, West Elgon, in Uganda; Kibingei and Kimiriri Rivers, Elgon, Kakamega, Elgeyu, Burnt Forest, Londiani, Molo, Nairobi, in East Africa. Twenty-five specimens.

541. **Bradornis murinus suahelicus** van Someren. **Eastern Ashy Shrike Flycatcher.**

Bull. B.O. Club, xli. p. 104, 1921.

I have had a large series of birds from the type locality before me, also a good series of this race. It is evident that the typical birds are much greyer above and below, not so brownish. The eastern ones are larger.

Masindi, Entebbe, Kyetume, Jinja, Soronko, Elgon, in Uganda; Kibingei, Suk, Kisumu, Nakuru, Londiani, Kakamegoes, Nairobi, Kitui, and Sagala in East Africa (type Londiani).

542. **Bradornis griseus griseus** Rchw. **Large White-throated Grey Shrike Flycatcher.**

These are large greyish birds with striped heads and greyish undersides, except for the throat and abdomen, which are white. Wings, 85–90 mm.

Magadi Lake, Srita, Kendu Bay.

543. **Bradornis taruensis** van Someren. **Lesser White-throated Grey Shrike Flycatcher.**

Bull. B.O. Club, xli. p. 104, 1921.

Smaller than *B. griseus* or *B. griseus pumilus* and darker above, having a brownish tinge to the grey back. I have compared unworn full-plumaged birds. They differ from *B. g. pumilus* in having the white throat more extensive and clearly demarked, and in having the abdomen whiter, not tinged with greyish. Wings, 70–80 mm. Head streaks distinct.

Thorn-bush country of the Taru: Manugu, Samburu, Sagala, Taveta, M'buyuni, Campi-ya-bibi (type). Thirty-one specimens.

544. **Bradornis griseus pumilus** Sharpe. **Northern Lesser White-throated Shrike Flycatcher.**

Agree perfectly with the South Abyssinian birds.

Meuressi, Turkwell, Uganda.

545. **Bradornis griseus** ? subsp.

Much more heavily built than the birds from Tsavo and nearer to *B. griseus* and *g. pumilus*. Wings, 80–87 mm. They are, however, rather worn, heads striped.

Simba, Kitui, Nairobi.

546. **Bradornis pallidus pallidus** v. Müll. **White-throated Brown Flycatcher.**

These birds agree with typical *pallidus* in the Tring Museum. They are totally different from the next race, which is a coastal form.

Masindi and Unyoro, Uganda.

547. **Bradornis pallidus subalaris** Sharpe. **Pale-breasted Coast Flycatcher.**

These birds are distinctly different from birds collected farther inland in the Taru district and also from *B. pallidus* of Abyssinia or Nile districts. The series is constant and not damaged by wear. As Sharpe described "*subalaris*" from a Mombasa bird, I am compelled to adopt his name for these specimens.

Mombasa, Changamwe, Mazeras.

548. **Muscicapa striata striata** Pall. **European Spotted Flycatcher.**

Kisumu, Nakuru, Naivasha, Nairobi, Tsavo, Limba; Masindi.

549. **Muscicapa striata neumanni** Poche. **Neumann's Spotted Flycatcher.**

These birds are paler greyish on the back, larger, and with the breast markings pale.

Lake Jipe, Tsavo, Changamwe, Nairobi.

550. **Alseonax lugens melanoptera** Jacks. **White-throated Dark Grey Flycatcher.**

Erroneously referred by me to *A. lugens* in *Ibis*, 1916. They are darker than *A. lugens lugens* and, according to the description, whiter on the belly and under tail-coverts.

Chamburu River, Toro.

551. **Alseonax griseigularis** Jacks. **Little Grey-throated Flycatcher.**

The birds referred by me to *A. ansorgei* Hart. in *Ibis*, 1916, should belong to this species. I consider that *A. ansorgei* should be kept distinct from *A. griseigularis*, as the type is darker than any bird in my series. It is probably a race of the Uganda bird.

Bugoma, Budongo, Lugalambo, Mubango, Kyetume.

552. **Alseonax cinerea brevicauda** Grant. **Little Pale-breasted Grey Flycatcher.**

As in the majority of cases, the Uganda "Grey" Flycatchers are not the same, but races of the West Coast birds. I prefer to keep these specimens under Grant's name for them, until typical specimens of *A. cinerea* can be compared.

Ogilvie-Grant's remarks on the groups of "Grey" Flycatchers in *Ibis*, 1917, require considerable modification, as my series of birds of this group shows his conclusions to be wrong in many instances.

Masindi, Kyetume, Mabira, in Uganda.

553. **Alseonax coerulescens kikuyuensis** van Someren. **Kikuyu Flycatcher.**

Bull. B.O. Club, xli. p. 102, 1921.

These birds are very much like *A. c. coerulescens* from Natal and Angola, but distinctly greyer below, the white throat is more restricted, with a wide grey chest-band, the abdomen more or less flecked with greyish. Wings, 74–80 mm.

Nairobi, Kyambu, in the Kikuyu Mountains, 5,000–6,000 feet. Type ♀ ad. Kyambu Forest, 19.iii.1916. Eight specimens.

554. **Alseonax coerulescens ?cinereola** Finsch and Hartl. **Coast Grey Flycatcher.**

These birds are greyer than *A. c. kikuyuensis* and have heavier bills. They are found in the desert thorn-bush country, not dense forests. As Finsch and Hartlaub described a bird from the coast of Tanganyika Territory under the name of "*cinereola*," I have had to apply this name to these birds, even though they do not agree with the coloured plate of Hartlaub's type in Von der Decken's book on *East Africa*.

Tsavo, Sagala, Teita.

555. **Alseonax infulata infulata** Hartl. **White-throated Brown Flycatcher.**

South Ankole and Entebbe in Uganda; Kisumu in British East Africa.

556. **Alseonax murinus murinus** Fisch. & Rchw. **Little Brown Forest Flycatcher.**

Birds from Molo Forest at 9,000 feet are rather richer brownish below than others from Nairobi district, but such birds can be matched by Escarpment specimens. Unfortunately Kilimanjaro birds are not available to me for comparison.

Nairobi, Molo, Burnt Forest, Elgeyu.

557. **Alseonax murinus pumilus** Rchw. **Uganda Little Brown Forest Flycatcher.**

Birds from Elgeyu west to Masindi are much paler below and have white not buffy throats; but as the variation is great between birds from type locality of *A. pumilus* (Bukoba), I have no hesitation in referring all to this race, though in East Uganda one gets birds which are hardly separable from Nairobi specimens.

Masindi, Kyetume, Elgon, and Budu in Uganda.

558. **Pedilorhynchus comitatus stuhlmanni** Rchw. **Little Dark Grey Forest Flycatcher.**

Busiro, Budongo, Lugalambo, Mubango, in Uganda.

559. **Pedilorhynchus epulatus seth-smithi** subsp. nov. **Little Yellow-legged Flycatcher.**

Six specimens, Seth-Smith coll., from Budongo are richer, darker grey than birds from West Africa, i.e. *epulatus* and *flavipes*. These birds have ochre-yellow legs; the lower mandible is yellowish.

Budongo Forest, Uganda.

560. **Artomyias fuliginosa** ? subsp. **Uganda Dusky Flycatcher.**

Specimens from Uganda, though agreeing in colour with birds from Gaboon and Angola, are smaller. Wings, 78–80, as compared to 80–87 mm. in western birds. As my series is not large enough, I refrain at present from separating them.

Mubango and Mabira.

561. **Cryptolopha budongoensis** Seth-Smith. **Uganda Green Flycatcher.**

The birds from Elgon and North Kavirondo do not differ from birds from the type locality. It is an excellent species.

Elgon and Budongo in Uganda; Nyarondo in East Africa.

562. **Cryptolopha mackenziana** Sharpe. **East African Green-winged Brown Flycatcher.**

My series of 13 ♂ 7 ♀ is made up of birds from various parts of the highlands of East Africa, and very little variation exists in coloration. Young birds are rather more olive on the head.

Kenia, Escarpment, Molo, Burnt Forest, Londiani, Aberdares, Elgeyu, and Elgon.

563. **Cryptolopha alpina** Og.-Grant.

Limited to the highlands of the "central lake district."

564. **Cryptolopha laeta** Sharpe. **Little Rufous-faced Flycatcher.**

This form is found in hills of the Ruwenzori area, south to Ankole and Kivu.

Lukiga, S. Ankole.

565. **Chloropeta massaica storeyi** Grant. **East African Yellow Flycatcher.**

The young birds, compared with young of the Uganda race, exhibit marked differences. The East African ones have dark brownish black heads, the northern dull brownish. I have compared my birds with the type of *C. storeyi*, and they agree; but my birds from the type locality vary somewhat in the intensity of the dark blackish brown crown.—I have no typical *massaica*, and it is quite possible that *storeyi* is not separable.

Kenia, Nyeri, Fort Hall, Kyambu, Nairobi, Kavirondo, South-east Elgon.

566. **Chloropeta massaica umbriniceps** Neum. **Northern Yellow Scrub Flycatcher.**

As remarked above, the young of this race and of *C. massaica storeyi* differ. The Uganda birds agree exactly with S. Ethiopian specimens, and they have the head olive-brown, not black-brown as in the East African race. One specimen from Mubendi, Uganda, has a dark head hardly distinguishable from southern birds; however, seven adults from Uganda agree with Neumann's cotypes.

Kigezi, South Ankole, Kyetume, Mubendi, Busindi, Jinja, in Uganda.

567. **Chloropeta natalensis kenya** Sharpe. **East African Green-headed Yellow Flycatcher.**

Whether these birds are really separable from *C. similis* from Kilimanjaro is difficult to say, as we have no specimen from Kilimanjaro for comparison. It is a bird of the high country. The wings of this series vary from 56–63 mm.

Kenia, Escarpment, Aberdares, and Molo.

568. **Stizorhina fraseri vulpina** Rchw. **Large Rufous Flycatcher.**

S. f. intermedia Clarke.

I very much doubt whether *S. intermedia* of Stephenson Clarke is really a good race. My series gives the wing measurements of 93–106. My series of 1906–1914 corroborate these measurements. The largest bird comes from Bugoma. Thus it will be seen that my birds range from the minimum of *S. vulpina* to the maximum of *S. v. intermedia*. Further, one must remember that males are very much larger than females in this species. As Colonel Clarke says nothing about coloration, I presume the birds to be alike in this respect. Certainly birds from west of the Semliki, *i.e.* type locality of *S. vulpina*, do not differ from Uganda birds, but birds from North Tanganyika do differ. They are smaller, wings 92–100 mm., and have the central tail-feathers rather darker.

569. **Megabias atrialatus aequatorialis** Jacks. **Large Broad-billed Pied Flycatcher.**

This is an excellent and constant race.

Kyanja, Mabira, Bugoma, Uganda.

570. **Bias musicus femininus** Jacks. **Crested Flycatcher.**

The birds from Uganda, separated from the typical *B. musicus* from West Africa on account of the paler backs and paler undersides in the females, are a recognisable race. They, however, do not differ so much as do the Angola females. These are much the same on the back as typical birds, but the underside lacks the rufous tinge except on the sides of the chest. This race I name *Bias musicus pallidiventris* subsp. nov.

Angola to Tanganyika. Type ♀, 23.xi.1903, Angola, Ansorge coll. Six skins examined, all constant. (Tring Museum.)

A third race is easily separable and is described below.

Budu, Entebbe, Mubango, in Uganda.

571. **Bias musicus changamwensis** van Someren. **Coast-crested Flycatcher.**

Bull. B.O. Club, November 1919, p. 24.

Very like *Bias pallidiventris* from Angola, but clearer white below, and very pale rufous above, lacking entirely the dark blackish centres to the feathers of the mantle, and it is smaller. The male differs from typical *B. musicus* and *B. m. pallidiventris* in being more oily-greenish above, especially on the head. Wings, 80–82 mm.

Coast lands of East Africa. Changamwe, Mombasa. (Type, ♀ Mombasa, 21.vii.1918.)

The races of this bird are :—

Bias musicus musicus Vieill. (Type, Gold coast.)
Liberia, Sierra Leone to Camaroon.

Bias musicus pallidiventris van Som. (Type, Angola.)
Angola to West Tanganyika.

Bias musicus femininus Jackson. (Type, Entebbe.)
Uganda.

Bias musicus changamwensis van Someren. (Type, Changamwe.)
Coast of East Africa.

572. **Smithornis capensis medianus** Hart. and van Som. **East African Broad-billed Flycatcher.**

This bird was described in the *Bull. B.O. Club*, 1916, and we united with the East African bird five specimens from North Tanganyika. Now that I have procured a large series of eastern birds, it appears that the Tanganyika ones do not quite agree. They are rather more ochraceous on the sides of the breast and more brownish on the back. That they may possibly be distinct is strengthened by the distribution : first of all the bird does not occur, to our knowledge, anywhere between Nairobi and Baraka ; and further, in between, in North Kavirondo, there is a markedly distinct bird.

Nairobi and Kyambu Forests.

573. **Smithornis capensis meinertzhageni** van Someren. **Kavirondo Broad-billed Flycatcher.**

Bull. B.O. Club, p. 24, November 1919.

These birds are smaller than *S. capensis* and *S. medianus*, and besides lacking any ochraceous on the sides of the chest, they are very heavily streaked with black on the breast and flanks ; further, the mantle, which is olive tinged with brownish, has the centres of the feathers blackish, giving the upper surface a mottled appearance. Besides my three birds, there are six other specimens procured in the same locality by Allan Turner, when collecting for Major Meinertzhagen. Type in the Tring Museum.

Nyarondo, North Kavirondo.

574. **Smithornis rufolateralis budongoensis** subsp. nov.

Bull. B.O. Club, xli. p. 103, 1921.

These birds are much like *S. rufolateralis* from Camaroon, but have smaller bills and the heads greyish, not brown.

Bugoma and Budongo Forest. Only three females examined.

The races of *Smithornis* and their known distribution is as follows :—

Smithornis capensis capensis Smith. (Type, Cape.)
South Africa.

Smithornis capensis camarunensis Sharpe. (Type, Camaroon.)
Camaroon.

Smithornis capensis albigularis Hart. (Type, Angola.)
Angola.

Smithornis capensis mcdianus Hart. and van Som. (Type, Kyambu.)
Nairobi district and ? North Tanganyika and West Toro.

Smithornis c. meinertzhageni van Som. (Type, Nyarondo.)
North Kavirondo.

Smithornis rufolateralis rufolateralis Gray. (Type, Gold Coast.)
Camaroon to Liberia.

Smithornis r. budongoensis van Som. (Type, Budongo Forest.)
Forests in western Uganda and eastern Belgian Congo.

Smithornis sharpei Alex. (Type, Fernando Po.)
Fernando Po.

Smithornis zenkeri Rchw. (Type, Camaroon.)
Camaroon.

575. **Hyliota flavigaster ? Violet-backed Flycatcher.**

3 ♂ 3 ♀, which I cannot place with certainty. They exhibit the characters of both races. Some of these birds are like *H. flavigaster*, others like *H. f. barbozae* —that is, with the third and fourth secondaries widely edged with white. Every intermediate stage is found. As regards size, the wing measurements come within the extremes of the two races recognised.

Kyetume, Elgon, in Uganda ; North Kavirondo and Fort Ternan in East Africa.

576. **Batis minor suahelica** Neum. **Coast Brown-barred Puff-backed Flycatcher.**

This appears to be quite a good race, ranging from Mombasa to the Taru and to the coast of the Tanganyika Territory. Wings, 55–58 mm. It is very like *B. minor nyansae*, but smaller.

Mombasa, Changamwe, Samburu, Taveta, Sagala.

577. **Batis minor nyansae** Neum. **Uganda Brown-barred Puff-backed Flycatcher.**

I do not agree with Sclater and Praed (*Ibis*, 1918) that "*minor*" is a synonym of "*bella*." *B. minor* came from South Somaliland, while the type of "*Bella*" is from E. Abyssinia. I have gone carefully over Neumann's review of this series and uphold this race as being perfectly good.

South Ankole, Budongo, Sezibwa, Jinja, Soronko, in Uganda ; Kisumu, Kakamega, and Kendu Bay in East Africa.

578. **Batis molitor puella** Rchw. **Kilimanjaro Brown-chin Puff-backed Flycatcher.**

This is a race with dark chestnut breast-band and chin-patch, and considerably larger than the coastal form. It occurs inland, from Kilimanjaro to Uganda.

Simba, Nairobi, Kyambu, Naivasha, Nakuru, Burnt Forest, Elgeyu, Maraquet, S. Elgon.

579. **Batis molitor taruensis** van Someren. **Coastal Brown-chin Puff-backed Flycatcher.**

Bull. B.O. Club, xli. p. 103, 1921.

These birds, which range from the coast and into the Taru desert, are a small race, characterised by the males having a rather large pre-orbital spot, which is

extended back over the eye as a broad superciliary stripe. Thus they resemble somewhat the male of *Batis minor suahelica*, but are larger and grey on the head and mantle. The females possess this same white superciliary band extending to the hind neck, and differ from females of *B. minor suahelica* in having the brown chin-patch.

As *Batis m. suahelica* is to *B. m. nyansae*, so is *Batis molitor taruensis* to *Batis molitor puella*.

Samburu, Maungu, and Changamwe.

580. **Batis soror perkeo** Neum. **Pigmy Puff-backed Flycatcher.**

These birds agree well with two specimens from Somaliland collected by Donaldson Smith and referred to this race by Neumann. They have rather less yellowish ochre on the chins than the two Somali birds. In Somaliland is also found *B. minor*. This led Neumann to consider *B. perkeo* a species, but I suggest that it is really a small race of the pale-banded birds of *Batis soror*. In support of this I indicate below the presence of a race linking up the two extreme types. That *B. perkeo* is distinct from the "*molitor*" group is proved by the fact that a form of *B. molitor* inhabits the area of *B. perkeo* in East Africa!

Tsavo, M'buyuni, Campi-ya-bibi, Maungu.

581. **Batis soror pallidigula** van Someren. **North Mozambique Pale-breasted Puff Flycatcher.**

Bull. B.O. Club, xli. p. 103, 1921.

In the coastal districts of Portuguese East Africa is found a *Batis* belonging to the *B. soror* group which differs from typical *B. soror* by having the breast-band somewhat paler and the chin-spot much paler. Such birds have hitherto been regarded as *B. soror*. On the island of Zanzibar is found a race which Neumann calls *Batis littoralis*. This has the breast-band darker than *B. soror*.

Lumbo, North Mozambique to Tanganyika Territory, and Vanga. Type ♀, Lumbo, 17.vii.1918.

582. **Platystira peltata peltata** Sund. **Kilimanjaro Black-throated Wattle-eyed Flycatcher.**

P. p. cryptoleuca Mearns.

These birds have been collected from the coast up to Escarpment. It is noticeable that up-country birds are larger than coastal ones, the former males having wings of 67–68 and the latter 60–65 mm. A larger series may show this to be constant or otherwise.

Changamwe, Tsavo, Taveta, Nairobi, Naivasha.

583. **Platystira peltata jacksoni** Sharpe. **Elgon Black-throated Wattle-eyed Flycatcher.**

This is an excellent race, differing from the southern form by having the throat and head in the female blue-black, not green-black. So far I have not obtained this bird farther south than Molo.

Elgon, Kibingei River, Maraquet, Elgeyu, Molo.

584. **Platystira cyanea nyansae** Neum. **Brown-throated Wattle-eyed Flycatcher.**

Common in Uganda and lake district.

Budu, Bugoma, Budongo, Sezibwa, Kasala, Mubango, Kawala, North Elgon, in Uganda; Kisumu and Kakamegoes in East Africa.

585. **Diaphorophyia jamesoni** Sharpe. **Brown-cheeked Puff-backed Flycatcher.**

A common species in Uganda forests; a few tend to exhibit less chestnut on the cheeks than normal, showing their close relationship to the western species.

Budongo, Bugoma, Kasala, Mubango, Lugalambo, and Elgon in Uganda; Kakamegoes and Nandi in East Africa.

586. **Diaphorophyia castanea** Fras. **Little Brown Puff-backed Flycatcher.**

I have compared my large series with West African birds and can find no difference in colour, with the exception of the somewhat larger white chin-spot in eastern birds, but this is variable. On the other hand, measurements of the wings show that the eastern birds are larger by 3 mm. (to 5 mm. in one bird); but as the colour does not vary, I do not separate them.

Budongo, Bugoma, Masindi, Mubendi, Kawala, Mubango, Mabira, Sezibwa, Elgon, in Uganda.

587. **Erythrocercus holochlorus** Erl. **Little Golden Flycatcher.**

Not a common bird and appears to be limited to the coast region. A. B. Percival procured two specimens on the coast in 1913.

Changamwe, Mombasa.

588. **Erythrocercus thomsoni** Sharpe. **Little Bar-tailed Golden Flycatcher.**

This bird has been taken on the coast of Vanga district in East Africa. Whether or not it is related to *E. holochlorus* I am unable to say.

589. **Erythrocercus maccalli congicus** Grant. **Little Chestnut-capped Flycatcher.**

This is apparently as rare as the two preceding, but several specimens are now in collections. The young bird lacks the chestnut cap, and has the crown merely tinged with brownish and the throat very pale brownish.

Budongo Forest, Uganda.

590. **Elminia longicauda teresita** Antin. **Blue Paradise Flycatcher.**

The amount of blue on the throat and breast varies in individuals—in some it extends to the lower breast. Occasionally one meets with specimens which show an affinity with *E. albicauda* Boc.

Budongo, Bugoma, Masindi, Entebbe, Kyetume, Jinja, in Uganda; East Elgon, Nandi, and Kibegori in East Africa.

591. **Elminia longicauda albicauda** Boc. **White-tailed Blue Paradise Flycatcher.**

South Ankole, Kigezi, Uganda.

592. **Trochocercus cyanomelas bivittatus** Rchw. **Blue-throated White-bellied Crested Flycatcher.**

I have no birds from the type locality to compare, but my males show rather less white on the wing-coverts than does a single male from the Tanganyika Territory which has been identified as "*bivittatus*" by Neumann. Young birds are like the females in general colour, but greyer, lacking the greenish-blue metallic gloss of the head and mantle. The well-developed crest is grey, the wing-coverts are tipped with rusty.

This is not a common bird, and has to be hunted for. One can always recognise its call from that of *Tchitrea suahelica*, on account of its higher pitch and more penetrating character. I have not met with this bird except in the places mentioned below. The eggs are whitish, tinged pink, speckled brownish and purplish.

Nairobi and Kyambu Forests.

593. **Trochocercus vivax** Neave. **Spotted-wing Crested Flycatcher.**

The occurrence of this species in Uganda is rather curious, as the type came from Kitanga. An adult male and female were collected by Seth-Smith at Mubendi.

Lugalambo, ♀, 3.ii.1919.

594. **Trochocercus nitens** Cass. **Blue-headed Crested Flycatcher.**

T. reichenowi (nec Sharpe ?) van Someren (*Ibis*, 1916).

With additional material I am convinced that the birds I placed as a distinct species in 1916 are extremes of one form. My 1914 birds were taken up to the British Museum and compared for me by Ogilvie-Grant, who reported them to be *T. reichenowi*. In one male there is a decided area of white between the blue of the throat and the grey of the breast. This white line is indicated in a second specimen and entirely absent in the other two. The females are alike. Two males thus agree with the original description of "*nitens*." It would appear, then, that *T. reichenowi* is doubtfully distinct from "*nitens*," as my birds agree with both forms; more material from the type locality of "*reichenowi*," i.e. Fanti, is required. Two males from Camaroon identified as *nitens* are without white on the breast. Type locality of *T. nitens* is Gaboon.

Mabira, Mubango, Lugalambo.

595. **Trochocercus albonotatus** Sharpe. **Dusky White-tailed Crested Flycatcher.**

These birds can always be distinguished from *T. albiventris* (Jacks) by having the outer tail-feathers white or almost entirely white. Young birds are rather duller above and below and resemble the adults of the race found in the Tanganyika district. The distribution of this race is important and should be noted.

Elgon (type locality), Kakamegoes, Elgeyu, Sherengani, Marakwet, and Molo.

596. **Trochocercus albonotatus** ? subsp. nov. **Tanganyika Dusky-crested Flycatcher.**

This race may differ from typical *albonotatus* (Sharpe) of Elgon by being paler greyish above and below and in having the crown and throat sooty matt-black—

not pure black. The distribution would support the contention that this is a recognisable race. The typical bird ranges from Elgon along the line of forests on the east of the Rift Valley, and does not occur in Uganda nor yet in German East Africa; and this race is apparently found along the chain of forests from south Lake Albert, Semliki to Tanganyika.

♂, 16.vi.1908, Tanganyika. Grauer coll., in Tring Museum.

597. **Trochocercus albiventris toroensis** Jacks. **Toro Dusky-crested Flycatcher.**

I consider this to be the Uganda race of *T. albiventris* Sjöst. from Camaroon. It differs in having much less white on the abdomen. It ranges from the Albert Edward Lake, through the Semliki Valley, to North Tanganyika.

598. **Trochocercus nigromitratus kibaliensis** Alex. **Black-capped Crested Flycatcher.**

This race is very close to *T. nigromitratus*. It is rather plentiful in the forests of Western Uganda, but also found in the eastern forests though not commonly.

Bugoma, Budongo, Mubango, Lugalambo, in Uganda.

Genus Tchitrea.

I have gone over the series in Tring, in the hopes that with my material something might be found out with regard to the ranges of the several races named. Apparently even this mass of material is not sufficient. In the Tring Museum there is a most remarkable series from Gaboon, exhibiting every variation in colour to which these birds are subject. There, however, appear to be certain types of plumage which are more constantly met with in some regions, and as names are applicable to such, we must for the time being refer to these names, birds which conform more or less to these types. Further than this one cannot go, at present. Neumann's review of this group is certainly the best so far, but I cannot agree with him that *T. v. suahelicus* is constantly brown, never assuming a white plumage—my large series shows otherwise; but, as I shall explain later, evidence with regard to habitat would seem to support his contention, but to agree would mean recognising two distinct species of the "*viridis*" group in East Africa.

In Uganda we find the most extraordinary birds—an apparent mixture of three types: *viridis*, *melanura* or *duchaillui*, and *ferreti*.

I thus classify my series as follows:—

599. **Tchitrea viridis viridis** S. Müller. **Blue-bellied Paradise Flycatcher.**

Dark brown backs, wings, and tails. *The wings and tails* with a *certain amount of white*. Head, neck, breast, and abdomen glossy blue, *blacker on abdomen*.

Kyetume and Toro, Uganda.

600. **Tchitrea melanura** subsp. **Brown-winged Paradise Flycatcher.**

Adults with bright chestnut backs, wings, and tails, *no white whatever*. Tail long. Breast and abdomen bluish grey. Head and crest blue-black. This type predominates in the Kivu and Lake Edward district. Some males slaty on mantle; rather a patchy plumage, apparently not a fixed race.

Kigezi, South Ankole, Nazigo Hill, Budongo, Uganda.

601. **Tchitrea suahelica** Rchw. **Grey-breasted Paradise Flycatcher.**

Adult males exhibiting brown backs, wings, and tails; wings with varying amount of white. Heads and throats glossy blue-black—*chest greyish*, abdomen *greyish* to *whitish at vent*. Under tail-coverts *buff* to *white*. *Only this type* is *found* in the FORESTS round Nairobi and Kyambu, where I have collected, one day every week, for the last four years.

Kyambu, Nairobi, *forests* at Taveta.

602. **Tchitrea ferreti** Guér.

First Variety.—9 ♂ 3 ♀, Uganda. *Brown-backed* birds with large amount of white on wing, tails brown. Head and neck glossy dark bluish, breast and abdomen grey. Forest and game country.

Second Variety.—11 ♂, Uganda. *Back, wings, and tail white*, head and neck glossy dark bluish, breast and abdomen grey, fading to white or buff at vent and under tail-coverts. In some birds two or three outer tail-feathers streaked with brown. Forest and cultivated land.

Third Variety.—2 ♂, Uganda. *Back wings and tail white, heavily streaked with brown.* Undersurface grey. Forest and cultivations.

All three varieties: Bugoma, Budongo, Masindi, Entebbe, Turkana, Moroto, Meuressi, in Uganda.

603. **Tchitrea ferreti or suahelica.**

Three with brown back, wings, and tails; white in wings and tails, heads bluish, breasts grey, abdomen grey, vents white or buffy. Four with backs, wings, and tails white; two streaked brownish on these parts. Breasts and abdomens grey. Inhabits *scrub*, *thorn-bush*, and *cultivations*.

Fort Hall, Lake Jipe, Simba, Kitui, N'ziu, and Elgeyu in Kenya Colony.

604. **Tchitrea emini** Rchw. **Emin's Paradise Flycatcher.**

Males on the whole more brightly and richly coloured than females—undoubted hybrids between *T. emini* and *ferreti* occur! Males shot 4.ii.1913 and 18.xii.1918 are coloured on the head and back as *emini*, but have much longer tails than normal; they have the underside whitish, streaked with pale chestnut and a white line on wings: apparently varieties.

Bugoma, Budongo, Lugalambo, Sezibwa, and Mabira. Of my large series of 26 ♂, 16 ♀, and 8 juv., five appear to be hybrids!

605. **Coracina pectoralis** Jardine and Selly. **White-bellied Grey Cuckoo Shrike.**

The Uganda specimens are larger than birds from West Africa by 5 mm. in the wing, but this is insufficient to warrant racial distinction. The coloration is the same.

Buremezi, Bukedi, Kibanda, Soronko, in Uganda; North Kavirondo.

606. **Coracina caesia pura** Sharpe. **Grey Cuckoo Shrike.**

Elgon, Elgeyu, Nairobi, Fort Hall, Kenia. 5 ♂ 5 ♀.

607. **Campephaga phoenicea** Lath. **Red-shouldered Cuckoo Shrike.**

C. xanthornoides Less.
C. rothschildi Neum. } = synonyms.
C. ignea Rchw.

For other synonyms see Neum. *Journ. f. Orn.*, 1915, p. 154.

There is not the slightest doubt that all the names mentioned above are synonyms of *C. phoenicea*, being merely varieties of true *C. phoenicea*. An important point to note is the fact that in all these birds the " shoulder " patch is large, extending in some cases on to the secondary coverts. The females of *C. phoenicea* can always be distinguished from females of the *nigra* group by having the head and mantle always brownish, and the yellow margins and tips to the wing-coverts and secondaries very narrow or entirely absent, giving the wing a more uniform appearance. Thus on account of the distinct females this bird cannot be the same as *C. nigra*.

Budongo, Bugoma, Gulu, Kalwanga, Entebbe, Sezibwa, in Uganda ; Kisumu and Kakamega in East Africa. Of eight males, two are of the *xanthornoides* variety.

608. **Campephaga nigra nigra** Vieill. **Black Cuckoo Shrike.**

At first sight it would appear that Neumann's suggestion (*Journ. f. Orn.*, 1915, p. 154) that the bird hitherto known as *C. hartlaubi* is merely a variety of *C. nigra* is unsound, but on examination of a large series of males and females it is at once evident that Neumann is doubtless correct. First of all with regard to the males, it will be noticed that the yellow patch is never pure, that is, the majority of feathers have some black in them, and the whole patch is limited to the lesser coverts—in some cases—the area being very small and never as large as in *C. phoenicea* and its varieties. Both males possess a yellowish wash to the inner webs of the primaries and secondaries, young males having the greatest amount of yellow wash.

Now, comparing authentic females of *nigra* and var. *hartlaubi*, it will be seen that they agree absolutely. They both have the head and mantle olive-green with slight brownish tinge and yellowish wash, and the wing-feathers are broadly edged with yellow.

In size they agree perfectly, and they occur together in the same districts.

Kobua, Rudolf, Kacheliba, Kisumu, Kendu Bay, Sio River, Burnt Forest, Nairobi, Embu, Tsavo, Changamwe. Of fourteen males, five are of the var. *hartlaubi*.

According to Oberholser, " *flava* " is the same as " *nigra* " and has priority.

609. **Campephaga petiti** Oust. **Petit's Cuckoo Shrike.**

(Type Landana.)

North Kavirondo and Nandi.

I have only seen birds collected by Mr. Allan Turner in North Kavirondo. There are also five females and presumably four males in the Tring Museum, collected by Dr. Ansorge at Nandi and North Angola, and by Grauer in the Kivu-Bukoba district and Mpanga Forest. When I worked out my collection of 1906–

14 at Tring in 1915 I accepted the two males labelled *petiti* and collected by Ansorge in North Angola (during the same week as the two undoubted females) as the true males of *C. petiti*. They did not, however, agree with the male described by Ogilvie-Grant (*P.Z.S.*, 1910) from M'panga. I was unable to accept Grant's bird as the true male, because the female had not been obtained along with it, nor yet was I prepared to look upon Grauer's birds as true pairs, because they had not been collected together, and this, combined with Grant's statement that the males were like *C. nigra*, but had the inner webs of the primaries without or with just a trace of yellowish wash, made me doubtful of the correct identification of these specimens. Neumann evidently accepted these birds as true males of *C. petiti* (*Journ. f. Orn.*, 1915, p. 151, 152) on Grant's statement. Now that I have seen the birds collected by Mr. Turner, as *shot together*, it establishes beyond doubt the fact that the male of *C. petiti* is like *C. nigra*, and not like *C. quiscalina*. I might mention that Mr. Turner knew nothing about the controversy regarding the male of *C. petiti*. It is extraordinary that the male of *C. petiti* should be exactly like the old male of *C. nigra*. Neumann places *C. petiti* as a subspecies of *C. nigra*, but as they occur together and the females are so distinct, I prefer to keep both as species. The range of this bird appears to be from the coast of Gaboon and North Angola to the Congo, through Kivu and Lake Albert to Elgon and Nandi, occurring in these localities with *C. quiscalina* and its subspecies *C. q. martini*.

Kakamegoes, Nyarondo.

610. **Campephaga quiscalina martini** Jacks. **Uganda Purple-breasted Cuckoo Shrike.**

The range of this bird has been considerably extended within recent years, as indicated below. The differences between the adult female of this and the parent race from Fantee have been given by me in *Ibis*, 1916. I should here like to emphasise that, whereas, according to the original description and skins from Sierra Leone, true *C. quiscalina* is greenish black, with a purplish throat and sides of head, *C. quiscalina* from North and South Angola has the purplish gloss extending on to the breast and abdomen! I would suggest that these latter birds belong to another recognisable race!

Mubendi, Mabira, north South Elgon, in Uganda; Kibingei River, Kakamega, Elgeyu, Escarpment, Nandi, Nairobi, Kyambu, Kenia!

Key to the Species and Subspecies of Campephaga.

Adult males:—

1.	Black with purple gloss on underside	2
	Black with blue-green gloss on underside	3
	Black with green gloss on underside	– *C. q. münzneri.*
2.	Purple limited to throat	– *C. q. quiscalina.*
	Purple extending to throat, breast, and abdomen	– *C. quis. martini* and *C. quis.* from Angola.
3.	With red shoulder-patch	– *C. phoenicea.*
	With a yellow shoulder-patch	– *C. nigra* var. *hartlaubi.*
	With no shoulder-patch	4
4.	Inner webs of primaries washed yellow	– *C. nigra.*
	Inner webs of primaries not washed yellow	– *C. petiti.*

Adult females :—

1. { Underside white, more or less barred . . 2
   { Underside yellow, uniform or barred. . . 3
2. { Head brownish, same as mantle . . . – *C. phoenicea*
   { Head olive-green, same as mantle . . . – *C. nigra*
3. { Head olive-green, like mantle . . . . – *C. petiti.*
   { Head greyish, contrasting with mantle . . . *C. quiscalina* and subsp.

611. **Eurocephalus rueppelli rueppelli** Bp. **Pale-backed White-headed Shrike.**

This race, which I do not consider a subspecies of *E. anguitimens* of South Africa, is smaller than the other more southern forms.

Gulu, Nile Province of Uganda.

612. **Eurocephalus rueppelli erlangeri** Zedl. **Abyssinian White-headed Shrike.**

E. r. fischeri and *E. r. deckeni* of Zedlitz are synonyms !

This race is larger and darker than *E. r. rueppelli.* This series represents birds which would be referable to *E. fischeri* and *E. deckeni* if these races could be upheld. I have compared my birds with the material in Tring on which these races were partly founded. I am of the opinion that if birds in fresh plumages from the ranges of these supposed races (such as mine are) are compared, they differ neither in size nor colour. As *E. erlangeri* is the first named race, this name must be adopted for the birds inhabiting Abyssinia, Somaliland south to Kenya Colony, and east and central Tanganyika Territory. *E. böhmi* from Western Tanganyika Territory and Nyassaland is a large pale form of *E. rueppelli* of the Nile district and Sudan. My birds are smaller and larger than the limits given by Zedlitz.

Changamwe, Samburu, M'buyuni, Tsavo, Kitui, Marich, Suk, Kacheliba, in East Africa.

613. **Prionops concinnata** Sundev. **Long-crested White-winged Prionops.**

This species occurs in the Nile Province of Uganda south to Unyoro and Chagwe.

614. **Prionops poliocephala** Stanl. **Short-crested White-winged Prionops.**

This bird occurs in the Vanga district of South British East Africa, and into Ukambani and Loita, where it occupies the same territory as *P. vinaceigularis* Richd.

Morogoro, Manugu. Collected by Loveridge.

615. **Prionops melanoptera vinaceigularis** Richmond. **Short-crested Black-winged Prionops.**

P. intermedia Sharpe.

In this series are rather striking differences. Four birds have much darker blue-black backs, the hind part of the head very dark ash-grey and the throats dark greyish. Wings, 108–115 mm. These birds come from the Teita Hills, 5,000 feet.

Nine specimens have the backs not so dark, rather greenish black, the nape

lighter ashy grey and the throat pale greyish to brownish. One specimen from Voi is nearer to the Sagala birds than the others. Wings, 103–114 mm.

I emphasise these differences because we meet with the same thing in the next group, *P. cristata.*

Sharp's *P. intermedia* came from Taveta and was described in 1901. Richmond's *P. vinaceigularis* (1898) came from east of Kilimanjaro.

Sagala, Teita Hills, Taveta, M'buyuni, Voi, and Tsavo.

616. **Prionops cristatus** Rüpp. **Long-crested Black-winged Prionops.**

? *P. c. omoensis* Neum.

Here again my series might be divided into two groups, for practically the same reasons as in the preceding species. Seven birds agree absolutely with the type of Neumann's *omoensis*, except that they are larger, wings 115–120 mm.; in other words, they are very dark grey on the posterior parts of head and hind part of crest tinged grey, throat dark. Thus we have seven birds collected south of Neumann's type locality agreeing with his bird. His birds were compared with a series of nine birds in Tring from Eritrea and South-east Ethiopia, which are all pale-headed with whitish throats, *except two*, one from Eritrea and one from South-east Ethiopia, which approach very closely the southern birds. Thus the typical birds vary, and in so doing render the validity of *P. c. omoensis* questionable. Five other birds, all collected at one spot to the south-west of Lake Rudolf on the Turkwell River, differ from the dark-headed birds by having the hind part of the crest cream-colour, the hind part of the sides of the head and the nape brownish ashy, and in having the throat tinged brownish. Wings, 121–123 mm. They are fully adult and in fresh plumage. If, therefore, birds from the type locality differ, and southern birds from a comparatively small area also vary, it is not unreasonable to suggest that *P. c. omoensis* is not a good race.

Dr. Hartert, in fact, is inclined to this view, but I am not in agreement with this. I suggest that *omoensis* is a good race, and that possibly there is another race inhabiting the south-end of Rudolf and Baringo districts, with characters as given above.

Mt. Moroto, Simu River, Kimiriri River; Elgon and North Turkwell River.

617. **Prionops poliolophus** Fisch. and Rehw. **Ashy-headed Crested Prionops.**

This species was collected by Doherty at Escarpment Station. It is of interest to note that a large portion of the forest and scrub in which Doherty collected no longer exists. The forest has been burnt and cut down and the entire aspect of the country altered.

618. **Sigmodus retzii graculinus** Cab. **Orange-billed Helmeted Shrike.**

I collected fourteen specimens. Some adults show traces of white on the inner webs of the primaries, and all the young and immature birds exhibit this character, indicating a very close relationship to *S. r. intermedius* and *tricolor.*

Mombasa (type locality), Changamwe, Sagala, Teita, Bura, Kitui, Nairobi, and Kyambu in East Africa.

619. **Nilaus afer erythreae** Neum. **Dark-flanked Brubru.**

My birds agree absolutely with the type and a series of the North Abyssinian birds in the Tring Museum, not with *N. afer afer* from Senegal. Other Uganda skins in Tring are also not typical *N. afer afer*. The Uganda specimens are distinct from the South-east Ethiopian birds, which have a broad chestnut flank, and have been called *N. afer hilgerti* Neum.

Soronko and Simu River in Elgon; Jinja and Kaina in Uganda.

620. **Nilaus afer massaicus** Neum. **Massai Chestnut-flanked Brubru.**

Seven birds are all alike and undoubtedly belong to this race. They have broad dark chestnut flank streaks. The localities are of great interest, as they show the line of extension from the type locality into Uganda. It will be seen that in no less than two widely separated districts this race of *afer* and a pale-flanked bird occur together. I would suggest that the "*minor*" or pale-flanked form be kept apart from the "*afer*" or dark-flanked group.

Taveta, Loita, Simba, Archer's Post, Northern Guasso N'yiro, Kendu Bay, in East Africa, and Toro in Uganda.

621. **Nilaus minor** Sharpe. **Pale-flanked Brubru.**

Neumann, in his review of the *Nilaus* group of shrikes (*Journ. f. Orn.*, 1907), places a bird from the Taru district under the South Somali race, *N. m. erlangeri*. Now, with my series, I fail to see how these birds differ from typical *N. minor*, of which Tring contains a good series, including a cotype collected by Donaldson Smith. Unfortunately, there are no South Somaliland birds available for comparison, so I am unable to say whether *N. m. erlangeri* Neum. from the type locality is really different from *N. minor*; certainly my Taru birds do not differ.

Samburu, Masongoleni, Kibwezi, Maungu, Voi, Taveta, Campi-ya-bibi, M'buyuni, Tsavo, Olgerei, Simba, Kitui, Lodomeru, Kerio River, South Lake Rudolf, in East Africa. Twenty-five skins.

622. **Harpolestes** * **australis emini** Rchw. **Lesser Scrub Shrike.**
623. **Harpolestes australis minor** Rchw.
624. **Harpolestes australis dohertyi** Neum.
625. **Harpolestes australis kivuensis** Rchw.

I have below separated four groups, according to their distribution and coloration, because it appears to me somewhat doubtful whether all of the names mentioned above can be upheld. It has been suggested that all the birds from the Semliki and Kivu district, through Uganda, south to Kenya Colony and Tanganyika Territory, should be united under the oldest name of the three—i.e. *H. minor*, type locality Kagehe, Simin River, south shore Lake Victoria. Even with my series of thirty-six skins and with the Tring series I am unable to come to any final conclusions about these races. Workers will readily appreciate the difficulties after perusing the characters I give for the four groups.

GROUP I. (*a*) West Uganda (Kivu, Bukoba, Budongo, Bugoma, north to Masindi). These birds, on the whole, have very white undersides tinged greyish

* = *Telephonus, Tclophonus, Pomatorhynchus, Tschagra*!

on the flanks and breast. A few soiled birds have the breasts washed olive-brown. The bills are large. (*b*) South Ankole, Budu, Kigezi. Very dark above and heavily washed greyish below, especially on the chest and sides of body. Eleven specimens collected by me.

Group II. Upperside similar to Group (I), but underside darker breast and flanks washed olive-brown. Bills on an average smaller. East Uganda, Entebbe to Jinja and Turkana. Six skins collected.

Group III. North Kavirondo and South Elgon (Lucosi, Nyarondo, Kakamegoes, Kimiriri). Very like Group (I), but rather greyer, and flanks much more tinged olive-brown. Bills larger than Group (II). Six skins.

Group IV. (Kitui, Simba, Nairobi, Kyambu, Fort Hall, Kenya, Naivasha, Nakuru.) Upper parts as in Group (I), but underside as in Group (II), and very frequently more olive-brown—two birds from Escarpment as pale as Elgon birds. The size is the same in all groups. Wings, 76–85 mm. It is apparent that the series of skins collected by Doherty at Escarpment, one of which is the type of *H. a. dohertyi*, are worn birds and a bit soiled; but many of my East African skins are not worn, but fresh, and they are darker than even the type. We have, then, in point of distribution, the following: Pale, dark, pale, dark. I unfortunately have no birds from type-locality of "*emini*." I do not think this variation can be due to season, but probably to age (not including quite young birds, which are always darker and have pale bills) and, I think, character of the soil in the district. The nature of the soil undoubtedly affects the coloration, without the birds being actually stained by it; it is more a colour adaptation.

626. **Harpolestes australis littoralis** van Someren. **Coastal Shrub Shrike.**

Bull. B.O. Club, xli. p. 102, 1921.

Smaller than the up-country species, having wings of 63–73 mm. compared to 75–85 mm. in *H. australis australis emini* and *minor*. Further, they are very pale on the underside, being whiter on the throat and abdomen, with a faint tinge of grey on the breast and flanks. Bills much smaller than in *minor*. Coast of Kenya Colony and Tanganyika Territory (Changamwe, Mombasa). Seven skins.

One male has a black crown as in *H. senegalus* group, and others show a strong tendency towards this character.

627. **Harpolestes senegalus orientalis** Cab. **Coastal Large Bush Shrike.**

Twenty of my own collecting, twelve in Nairobi Museum. Mombasa, Changamwe, Mazeras, Samburu, Lamu.

This is an easily recognisable race when compared with birds from South Africa, or inland British East Africa. It is characterised by having the underside clear whitish, the mantle sandy brown with an olive tinge.

Most of my birds are from the type-locality—Mombasa—to about Maungu, where it perceptibly changes, becoming greyer on the underside. From Taveta district, this intermediate form has received the name of *H. s. armenus* Oberh. This again ranges further inland, gradually becoming much greyer on the underside and still retaining the darker, richer brown back of the Taveta birds, the darkest and most greyish birds being found from Nairobi district, north into south Central Uganda, or Uganda Proper.

628. **Harpolestes senegalus armenus** Oberh.

9 ♂ 3 ♀ from the type locality of *H. senegala armena* to Voi and Kibwezi (Taveta, Lake Jipe, M'buyuni, Maungu, Masongoleni, Tsavo).

19 ♂, 4 ♀, 4 juv. from Simba north to Elgon and Uganda Proper (Kitui, Nairobi, Kyambu, Fort Hall, Kenya, Naivasha, Nakuru, Fort Ternan, Kisumu, North Kavirondo, Kerio River, Jinja, Lugalamba, Kyetume, Entebbe).

The last twenty-seven birds, on account of their marked greyish undersides, especially on the breast and flanks, cannot be confused with the coastal birds; but birds from Taveta and Voi, called "*armena*," run so very close to the latter that it seems a great pity that intermediates, such as these Taveta birds certainly are, should have received a name and not the birds from inland, at about 6,000—7,000 feet (Kikuyu). As matters now stand, the birds from Taveta north to Entebbe will have to bear the name *Harpolestes senegala armena* Oberh.

Besides my big series, I have used the material in Tring for comparison, and have endeavoured to compare birds in clean fresh plumages only. I brought home with me, for purposes of comparison, six skins from Lumbo, North Portuguese East Africa, and these turn out to be quite distinct from any of the described races and, being a recognisable race, require naming.

It will be seen that the localities comprise a series of birds from Mombasa at the coast up to Uganda, taking in all types of country and starting from sea-level, going up to 8,500, to drop again to 3,500 feet.

629. **H. senegalus mozambicus** van Som. **Mozambique White-bellied Scrub Shrike.**

Bull. B.O. Club, xli. p. 103, 1921.

I have before me six of a series of over a dozen which were collected at Lumbo, North Portuguese East Africa. They come from a locality little explored, ornithologically, and prove to be a very pale race. The characters are: Mantle very much paler than *H. s. orientalis* from Mombasa and whiter on the underside. Rump greyish. Size as in *H. s. orientalis*. The series is remarkably constant.

When working out this group I went into the question of the names "*senegalus*," "*erythropterus*," and "*tschagra*." Both Neumann and Shelley (*Birds of Africa*, v. pt. 2, edited by Sclater) adopt the name *erythropterus* for the South African bird and *senegalus* for the Senegal form. A study of the original descriptions and plates, however, reveals the fact that Neumann is wrong in applying *erythropterus* of Shaw for the South African bird, because Shaw founded this name on Daubenton's (Buffon's) *Planche Illuminée*, 479, which distinctly depicts a bird with a black head, and the locality given is "senegal"! Shaw states that possibly his bird is the same as the Senegal Shrike of Linnaeus, *H. senegalus*, and in this he is correct. His further remarks to the effect that Levaillant had accurately described "*erythropterus*," in *Hist. Natur.* (1799), no doubt referred to the second part of the general remarks made by Levaillant and not to his diagnosis. Now, turning to Levaillant's plate 70 (1799), we find that the bird there depicted is one with a *brown crown* and *a long slender bill*, i.e. undoubtedly the bird now known as *H. longirostris*, the Tshagra Shrike! The first description, which we must accept, says that the bird has the top of the head *black-brown with olive wash—not black*, and further describes a *white line* from

base of bill to nape, passing over the eye, and the whole of the underside "ashy." That fits undoubtedly *H. longirostris*, not *senegalus*. In further remarks it appears, no doubt, that the black-headed South African bird was confounded with the brown-headed; but this *does not alter the first description*, nor the plate of an "adult male and female."

The only South African bird with a black head belonging to the *senegalus* group (because it is distinct from typical Senegal birds) requires a name. The name *coronatus* Vieillot is not available, because no type locality is given, and it was probably a western bird. I therefore name it **Harpolestes senegalus confusus.**

Type ♂, Umfalosi, Zululand, 2.viii.1904. C. H. B. Grant coll. (Tring Museum).

630. **Harpolestes senegalus soudanensis** Scl. and Praed. **Ashy-backed Bush Shrike.**

This has an ashy brown mantle, with practically no rufous tinge, and is somewhat smaller than *H. senegalus armenus*. It is found in Uganda in the northern province and also west of Lake Albert.

631. **Harpolestes jamesi jamesi** Shell. **Somali Stripe-headed Bush Shrike.**

Ten birds agree with specimens from Somaliland in having dark heads and distinctly greyish undersides. The peculiar spotted iris is remarkable, the size of the spots varying with the state of excitability of the bird, being large when the bird is excited, and contracting to mere pin-points when frightened.

Tsavo, M'buyuni, Maungu, and Kerio River.

632. **Harpolestes jamesi mandana** Neum. **Manda Stripe-headed Bush Shrike.**

I have compared my ten birds with typical ones, and they certainly are paler on the head and have a much wider black central stripe on the crown, and the underside is more whitish. I, however, also agree that the Kismayu birds are different, and place *H. jamesi kismayensis* Neum. as a good race.

Manda, Witu, Lamu.

633. **H. jamesi kismayensis** Neum.

♂, December 2nd, 1912; ♀, December 1912.
Juba River. ♂♀, December 1912. Percival coll.

634. **Harpolestes minutus minutus** Hartl. **Black-saddled Bush Shrike.**

I have no typical birds from Fanti, but Camaroon birds are more reddish above and more ochraceous below than East African specimens. I unfortunately have insufficient material of fresh unworn birds, in order to come to a final conclusion.

S. Ankole, Bugoma, Masindi, Kalwanga, in Uganda; Kisumu, Nyarondo, Fort Hall, Nairobi. 6 ♂, 3 ♀, 1 juv.

635. **Harpolestes minutus reichenowi** Neum. **Lesser Black-saddled Bush Shrike.**

Two specimens from Mombasa bear out the characters given by Neumann. They are smaller and rather paler.

636. **Nicator chloris chloris** Val. **Nicator.**

Though no specimens from Senegal are available for comparison, it appears that this bird does not vary, except very slightly in size, throughout its range from west to northern East Africa.

Bugoma, Budongo, Mubango, Kyetume, Mubendi, Sezibwa River, W. Elgon.

637. **Nicator chloris gularis** Finsch. **Brown-throated Nicator.**

I have no typical birds for comparison, but my six specimens are not as green on the back as depicted in the plate in Shelley, vol. v. pt. 2.

Sagala, Lamu, Mombasa, Bura.

638. **Urolestes torquatus** Cab. **Blue-banded Shrike.**

Has been obtained by Grauer in the Albert Edward district and is in the Tring Museum.

639. **Chlorophoneus rubiginosus rudolfi** Hart. **Buff-breasted Green Shrike.**

Obtained in the Kivu-Albert district by Grauer.

640. **Chlorophoneus rubiginosus andaryae** Jacks. **Uganda Buff-breasted Green Shrike.**

This bird was described by Jackson in the *Bull. B.O. Club*, June 1919. It is apparently near *C. rudolfi* and *C. r. münzneri* from Tanganyika Territory, but differs from both in having the mantle and central tail-feathers grey and the underside paler. It thus resembles very closely the young of *Dryoscopus jacksoni* (*Laniarius* auct.), but is rather greener, and the spotting on the tail and coverts larger. It is also bigger.

The type, the only specimen known, came from near Entebbe.

641. **Chlorophoneus sulphureopectus suahelicus** Neum. **Orange-breasted Shrike.**

The name *C. chrysogaster* cannot be used for this race, as it was founded on a Senegal bird. These birds are much more richly coloured than Uganda birds, and have wider and deeper orange breast-bands. As these birds extend inland they become paler; thus we find intermediates in the higher altitudes from Nairobi to Elgon—but west of this the birds are as pale yellow and have breast-bands as in *C. s. modestus* Bocage, from Angola. I separate these pale birds under the latter name. One adult female from Teita has the whole underside dull *ochre yellow*, without the orange breast.

Lamu, Changamwe, Mombasa, Samburu, Masongoleni, Teita, M'ziu, Ukamba, Simba. 16 ♂ 2 ♀.

642. **Chlorophoneus sulphureopectus modestus** Boc. **Western Orange-breasted Shrike.**

In these birds the females are paler than the males, which is not the case in coastal birds.

Nandi, Elgeyu, Escarpment, in East Africa; Elgon, Jinja, Entebbe, Bugoma, in Uganda. 8 ♂, 6 ♀, 2 juv.

643. **Chlorophoneus nigrifrons** Rchw. **Black-fronted Forest Shrike.**

My series of 11 ♂, 5 ♀, 2 juv. exhibits males and females in full plumage, many of them breeding birds. The young are in two stages: the youngest is a bird with the head and ear-coverts green, the other with the crown becoming grey while the ear-coverts are jet black, the undersurface olive-yellow, faintly barred. As I have no typical *nigrifrons* from Kilimanjaro I am unable to state whether my birds are quite indentical. If they are, I would suggest that *C. abbotti* of Richmond, and possibly *C. manningi* Shelley, are not separable from *nigrifrons*, for my birds agree well with the plate of *manningi* in the *Ibis*. The type of "*nigrifrons*" is probably a female and the type of "*abbotti*" a male.

Nairobi, Elgeyu, Molo, Elgon, and Escarpment.

644. **Chlorophoneus elgeyuensis** van Som. **Fire-breasted Forest Shrike.**

Bull. B.O. Club, November 1919, p. 23.

This extraordinary bird—of which my three females and one young appear to be the only ones so far known—differs from all the described forms of *Chlorophoneus*. The adult female is as follows: On the forehead a narrow black band. Crown, nape, and upper part of mantle dark grey, the rest of the back and rump bright olive-green. Wings green, with the inner webs of the primaries and secondaries edged yellowish; tail green. The ear-coverts are jet black and continuous with the black frontal band; below the lower edge of the ear-coverts is a clear bright yellow line; the throat and breast are a bright orange-red; abdomen and flanks olive-yellow, faintly barred on the latter. Thus these females are brighter than the males of *C. nigrifrons*, from which bird this new species can be easily distinguished, also by a comparison of the young. The young in this new species has the *crown and nape and ear-coverts grey*—not olive-green as in *C. nigrifrons*. The lower surface is yellowish green, faintly barred. One of the females moults from the first plumage described above, and has the ear-coverts black; on the throat and breast fiery orange feathers are appearing. Wing, 82 mm. This species is smaller than *C. nigrifrons* and has a longer, more slender bill. Wings, 87 mm.

Maraquet and Sherengani Hills, 8,000–9,000 feet.

645. **Chlorophoneus quadricolor nigricauda** Clarke. **East African Crimson-throated Green Shrike.**

T. q. intermedius Rchw.

In my series of 12 ♂ 4 ♀ I find six males have the central tail-feathers green or almost entirely green. Four old males have the tail-feathers entirely black, even at the base; in two the bases for the terminal 20 mm. are greenish! As I have not sufficient material of old males from South Africa I admit this race, presuming that typical *quadricolor* never gets an entirely black tail. The difference in the females mentioned by Colonel Clarke does not hold good—females of South African birds do have a black gorget. The amount of red on the breast is variable; in some birds, even in those younger males with green tails, the red extends to the abdomen, yet in some old males with black tails the red is limited to the throat above the black gorget.

Mombasa, Changamwe, Malindi, Sagala, Teita.

646. **Chlorophoneus dohertyi** Roths. **Doherty's Forest Shrike.**

This beautiful bird is fairly common in the forests at high altitudes. The southernmost locality appears to be Limuro, from which it extends up to Mt. Elgon. It then appears again in the Semliki and Kivu districts. In the last-mentioned district the bird becomes somewhat larger, and the crimson throat takes on a deeper shade, more magenta tinged. Wings, 75–86, as compared with 75–80 mm. in my series. It seems strange that this form should not be otherwise different, seeing that there seems to be a large break in its distribution, but possibly connecting links will be found later.

Kijabe, Aberdares, Molo, Elgeyu, Maraquet, Kakamegoes, Elgon. 9 ♂, 5 ♀, 4 juv.

647. **Rhodophoneus cruentus hilgerti** Neum. **Southern Red-breasted Desert Shrike.**

I have carefully gone into the races of *R. cruentus*, and this is a good subspecies. My series of this species are of extreme interest, because the form *hilgerti* and *cathemagmenus* must meet just about the line of the Athi–Tsavo River. Now, out of six males collected at Tsavo Station, five are certainly *hilgerti*, that is, they have no black band dividing the red streak on the underside, or it is only just indicated by a few black feathers as in North Somali birds! On the back these birds are washed with brownish crimson, but not to the same extent as in *R. c. cathemagmenus*, typical birds of which occur farther south. The pink breast-streak is paler than in *R. c. cathemagmenus*.

Tsavo, and Athi River junction. 5 ♂ 5 ♀.

648. **Rhodophoneus cruentus cathemagmenus** Rchw. **Black-collared Red-streaked Desert Shrike.**

This southern race can be distinguished from all others by the deep crimson-brown of the upperside, the bright crimson (not pinkish) breast-streak, and by the males having a decided black gorget. This form is fairly common in the dry thorn-bush country of the Taru Desert and Kilimanjaro districts.

Lake Jipe, Taveta, Maktau, M'buyuni. 13 ♂ 6 ♀.

649. **Laniarius leucorhynchus** Hartl. **Sooty-black Shrike.**

There appears to be no difference between the western and eastern birds, except in size—the wings of the former ranging a few millimetres larger.

Sezibwa River, Kyetume, Lugalambo, Mubango, in Uganda.

650. **Laniarius holomelas** Jackson. **Velvet-black Shrike.**

This species ranges in the Kivu and Albert Edward district, up to Lake Albert.

651. **Laniarius nigerrimus** Rchw. **Coast Black Shrike.**

? *L. n. erlangeri* Rchw.

I very much doubt if *L. erlangeri* is a good race. In my series of birds from Lamu and district I find the amount of white on the rump varies greatly, as does

also the colour of the inner webs of the wing-feathers. I find some white, others blackish, so that these characters are evidently not constant. The wings vary from 82 to 93 mm.

Manda and Lamu Islands.

652. **Laniarius funebris funebris** Hartl. **Large Grey-black Shrike.**

L. f. bergeri Rchw.

L. f. rothschildi Neum.

My series is made up of birds from North British East Africa and Uganda. They are quite distinct from the next race mentioned, by being larger and blacker. Birds from Baringo—type locality of *L. bergeri*—do not differ from specimens from Suk, and these are identical with Escarpment birds. The type of *L. funebris* came from the country east of Tanganyika, and though I have not sufficient material from this locality to state with absolute certainty that the Suk and Uganda birds are the same, my birds do not differ from the specimens available. I have examined the type and cotype of *L. rothschildi*, and consider that they are not separable. The characters given by Neumann are not exhibited in the specimens before me. One has lost all its rump-feathers, and they are specimens which have been mounted and sadly maltreated. This species does not appear to extend farther south in East Africa than South Kikuyu. South of this we get the smaller greyer race mentioned below. In the districts where the two races meet, interbreeding apparently takes place. Wings, 85–95 mm.

Mt. Moroto, Meuressi, Kerio, in Uganda; Suk, Baringo, and Escarpment in East Africa.

653. **Laniarius funebris degener** Hilgert. **Lesser Grey-black Shrike.**

These birds are really a smaller darker form of *L. f. atrocaeruleus* of N. Somaliland. Whereas in the latter the wings range from 86 to 95 mm., they are 80–85 mm. in the former.

This race is particularly plentiful in the Taru country, but very difficult to procure, owing to its skulking habits.

Simba, Kitui, Tsavo, Voi, M'buyuni, Maktau, Lake Jipe, Taveta, Maungu, Masongoleni, and Changamwe in East Africa. Twenty-two specimens.

654. **Laniarius aethiopicus major** Hartl. **Great Pied Shrike.**

I consider that this bird is a subspecies of *L. aethiopicus*, because I find, on examining a large series of typical *L. aethiopicus*, that there are quite a number of specimens which show a white margin to the inner secondaries. I find in my series that birds indistinguishable from Western Uganda specimens range as far south as Kikuyu, thus occupying part of the same territory as *L. a. ambiguus* Madaraz, that is, from Nakuru south to Kikuyu. Within this area hybrids are found. We must, however, retain the name *L. a. ambiguus* for the southern British East African bird, because in its southern limits it remains true to type. The following localities will exhibit the range of *L. ae. major*:

Budongo, Bugoma, Masindi, Mubendi, Singo, Entebbe, Sezibwa, Kyetume, Jinja, Elgon, in Uganda; Nandi, Elgeyu, Maraquet, Molo, Nakuru, Aberdares, Naivasha, and Kikuyu in East Africa. Thirty-seven specimens.

655. **Laniarius aethiopicus ambiguus** Mad. **White-shouldered Pied Shrike.**

My nine birds are true to type, and have the white feathers limited to the coverts. Whether this race interbreeds with *L. sublacteus* in the Kilimanjaro area, I am unable to say, but they both occur there.

Molo, Naivasha, Nakuru, Nairobi, Kyambu, Fort Hall.

656. **Laniarius sublacteus** Less. **Black-winged Pied Shrike.**

Does not appear to penetrate farther than South Ukambani. I have procured it at Mombasa, Changamwe, Sagala, Teita, Samburu, Lake Jipe, Makindu.

657. **Laniarius ruficeps cooki** van Som. **Taru Red-naped Shrike.**

Bull. B.O. Club, November 1919.

Distinguished from the typical North Somali form in having the forepart of the crown jet black, the hind half and part of the mantle bright red, and from *L. r. nuchalis* by having the nape-patch much larger and brighter red. In this way it also differs from *L. r. kismayensis* of Jubaland.

Maungu and Tsavo, Taru desert.

658. **Laniarius ruficeps kismayensis** Erl. **Crimson-naped Shrike.**

Apparently a good race, with a dull crimson nape-patch.

Juba River. ♂, 7.x.1912. A. B. Percival coll.

659. **Laniarius lühderi castaneiceps** Sharpe. **Cinnamon-breasted Shrike.**

When my twelve skins are compared with typical *L. lühderi* from Camaroon, it is at once obvious that the Elgon and Nandi birds are smaller and paler; the wings measure 80–86, as compared with 85–95 mm. in the typical race. As Sharpe described a young bird from Elgon as "*castaneiceps*," and although he afterwards suppressed it, finding out that it was an immature specimen, this name nevertheless is available and must be reinstated for the East African race of *L. lühderi*. This bird has not been procured in the forests of Uganda Proper, though Mr. Grauer obtained it in the Mpanga Forest, Toro. I have compared twenty-five Elgon birds.

Elgon, North Kavirondo, and Nandi.

660. **Laniarius lühderi lühderi** Rchw.

It seems that my two specimens from Lukiga and Kigezi, as well as a large series collected by Grauer in the Kivu-Tanganyika district, belong to the typical form.

661. **Laniarius mufumbiri** Og.-Grant. **Golden-crowned Red-breasted Shrike.**

My series greatly extends the range of this rare shrike. It has now been obtained from the Kivu district east to Mt. Elgon. The Elgon bird, however, is not quite typical, having the underside paler red-pink, not orange-crimson. The gold of the crown is paler. I find that the amount of white on the coverts is not constant; thus in some specimens several feathers are white both on the

secondaries and tertiaries, but in others only one or two feathers are tipped with white. The small size of this bird, however, at once separates it from the West African race.—The first plumage has apparently not been described. It is as follows:

Upperside dull black with some pale tips to the feathers of the mantle, crown-feathers broadly tipped ochraceous-buff, coverts of wings tipped and margined with buff. Underside yellowish pink, the feathers slightly more dull reddish on the breast, all the breast feathers tipped buffy white. Vent and thighs buff.

Mufumbiro, South Ankole, Kigezi District, Sezibwa River, Entebbe, and W. Elgon in Uganda.

662. **Laniarius erythrogaster** Cretzschm. **Crimson-breasted Shrike.**

L. e. chrysostictus Rchw. ? Synonym.

Out of my series of twenty, there are ten males with well-developed yellow tufts at the junction of the breast-feathers with the scapulars; thus I do not consider this a character on which to separate the Camaroon bird; further, this yellow bunch of feathers is present in some Erithrean specimens. The males which show the yellow feathers to the greatest extent are those which have the buff vent and under tail-coverts widely tipped with crimson, indicating a strong development of pigment cells. One male from Budu has several yellow feathers on the forepart of the crown.

Budu, South Ankole, Singo, Busiro, Buremezi, Jinja, in Uganda; Elgon, Marich, Kisumu, Kendu Bay, Nyarondo, in East Africa.

663. **Dryoscopus bocagei jacksoni** Sharpe. **Jackson's Black-capped Shrike.**

Four birds, along with thirteen others collected during 1907–14, show some variation, and specimens can be picked out which match the Angolan race, which has been named *D. b. ansorgei* by Sclater. The majority of Uganda birds, however, are purer grey on the back, and lack the olive tinge which is a constant character in the Angolan specimens.

I am of the opinion that this bird should not be placed in the genus *Dryoscopus* but in *Chlorophoneus*, because the bill and feet are characteristic of this latter genus, and the young in first plumage has the mantle, wings, and rectrices distinctly greenish, and with large pale tips to the secondary coverts. In fact, the young birds closely resemble the Shrike described by Jackson in *Bull. B.O. Club*, September 1919, as *C. andaryae*, which, however, is distinct and rather larger. The black cap so characteristic in adult *jacksoni* is greyish in the young.

Bugoma, Entebbe, Mabira; Nyarondo, Nandi.

664. **Dryoscopus angolensis nandensis** Sharpe. **Nandi Blue-headed Shrike.**

These birds, eight collected by my men, three by Turner, when compared with specimens from Angola and the Kivu and Semliki districts, show that there are three subspecies:

1. *Dryoscopus angolensis angolensis:* ♂, head blue-black; ♀, underside pale, back greyish.—Angola and Camaroons.

2. *Dryoscopus angolensis nandensis:* ♂, head grey-blue; ♀, darker cinnamon,

back with olive wash.—Uganda, east to Elgon, Nandi, and Elgeyu (Mabira, Nyarondo, etc.).

3. *Dryoscopus angolensis adolfi-friderici:* ♂, head darker grey-blue than in *nandensis*, back more olive.—Lake district, Semliki, Kivu, North Tanganyika. Though Reichenow suppressed his *adolfi-friderici*, I consider that it must be reinstated.

665. **Dryoscopus gambiensis nyansae** Neum. **Grey-winged Shrike.**

There is such an amount of variation in my series of twenty that I find it difficult to distinguish these birds from the few specimens from the White Nile at my disposal. The darkest and most intensely coloured females are from the Moroto district in Turkana.

Bugoma, Bira, Mawakota, Masindi, Moroto, Entebbe, and M'porogoma River in Uganda; South Elgon, Kibingei River, Soronko River, Kacheliba, Nyarondo, Elgeyu, and Nandi in East Africa.

666. **Dryoscopus pringlei** Jackson. **Desert Grey-winged Shrike.**

I have a series of twelve skins of this somewhat rare bird. Its range appears to be limited to the Taru Desert country.

Tsavo, Maungu, Maktau, Taveta, M'buyuni, and Campi-ya-bibi.

667. **Dryoscopus cubla hamatus** Hartl. **East African Puff-backed Shrike.**

D. c. suahelicus Neum. ? Synonym.

I find that sixteen birds from the coast and desert country are smaller than eight inland specimens, having wings of 75–82 as compared to 84–87 mm. in the latter. Further, I find that the females of coastal birds have white breasts, while inland birds have the breast tinged buffy. This character is also present in the large series I have examined in Tring. Similar large birds are found in the Kivu-Kagera Tanganyika district.—I have not taken or seen specimens of this bird from Uganda proper. It apparently does not go so far north.

Smaller form: Mombasa, Masongoleni, Maungu, Teita, Kitui, Lake Jipe. Larger form: Kyambu, Escarpment, Nairobi, Molo, Ravine.

668. **Dryoscopus affinis** Gray. **White-shouldered Puff-backed Shrike.**

D. salimae Hartl.

There are two youngish birds in my series which show indications of white on the outer webs of the inner secondaries, thus showing close relationship to the previous species. They, however, occupy part of the same territory and may occasionally cross, while in the Lamu district they remain true to type.

Mombasa, Changamwe, Lamu, and Manda Islands.

669. **Fraseria ocreata** Strickl. **Speckle-breasted Flycatcher Shrike.**

These birds, as also specimens in Tring from Uganda, are larger than the birds from the type locality, but I can find no other difference.

Budongo Forest, Uganda.

670. **Malaconotus monteiri catharoxanthus** Neum. **Great Yellow-breasted Shrike.**

I prefer to keep the uniform-breasted birds in one group and those with a chestnut band or wash on the breast in another; for the reason that we find both types occupying the same territory in part of the distribution of their races. Thus in Angola we find *M. monteiri* and typical *poliocephalus* together; and in Uganda *M. catharoxanthus*, *interpositus*, and *schoanus* side by side.

Masindi, Meuressi, North Kavirondo.

671. **Malaconotus interpositus** Hart. (?). **Hartert's Giant Shrike.**

One cannot distinguish my four birds from typical *M. interpositus*, yet as they occur in the same locality as *M. p. schoanus*, it seems to me that they must rank as a species or be united. I prefer for the time being to keep them separate.

Mt. Moroto, and Meuressi, Turkwell, Uganda.

672. **Malaconotus poliocephalus schoanus** Neum. **Northern Brown-chested Giant Shrike.**

Six birds agree in colour and size with this race, and are distinct from the birds inhabiting the highlands of East Africa and also from the birds of the coast and desert belt. They have wings of 110–125 mm. The plumage is constant.

Meuressi and West Rudolf in Uganda.

673. **Malaconotus poliocephalus approximans** Cab. **Mombasa Yellow-breasted Giant Shrike.**

Six birds, which are quite distinct from the highland form, are characterised by having a deep, bright chrome-yellow throat, sharply differentiated from the dark chestnut breast-band, which does not extend on to the lower breast, but is well demarked from the bright yellow of the lower breast and abdomen. The flanks are shaded chestnut.

This form ranges from the coast, from Pangani River to Malindi and inland through the Taru Desert to South Ukambani and East Kilimanjaro.

Changamwe, Lake Jipe, Masongoleni, Tsavo, Teita, Kitui.

674. **Malaconotus poliocephalus** subsp. nov. ?

Nineteen specimens of both sexes collected between 6.iv.16 and 20.v.16 on Manda and Lamu Islands and coast of the mainland opposite. These birds are very much paler yellow on the abdomen and throat and considerably smaller. They should probably be kept separate from *M. p. approximans*. Most specimens have the pale tips to the coverts tinged reddish. Wings, 105–115 mm.

675. **Malaconotus poliocephalus blanchoti** Steph. **Brown-breasted Giant Shrike.**

M. p. starki Sclater.

M. p. hypopyrrus Hartl.

Birds which are found in the highlands of East Africa are characterised by having the breast with a broad chestnut band, not sharply differentiated from

the throat, and extended well on to the flanks and upper abdomen. These are larger birds, with wings of 125–130 mm. Others in Tring from Kikuyu agree perfectly. I fail to distinguish them from South African specimens, and much as I dislike the distribution, I cannot do else but unite them with this race.

Birds from Lumbo, coast of North Mozambique, Portuguese East Africa, and from the coast south of Dar-es-Salaam are not the same as South African birds, having the brown breast-band more restricted, and they differ markedly from the Mombasa birds, *M. p. approximans*. They are quite different from the upland East African birds, yet, coming as they do from a southern country, I am compelled to keep them with the South African race for the time being, but a larger series may prove them different.

Highland form: Nairobi, Escarpment, Morogoro.

Southern coastal form: Lumbo, North Mozambique, and South Dar-es-Salaam.

676. **Lanius collaris smithi** Fraser. **Western White-shouldered Fiscal Shrike.**

Nine birds do not agree with the East African race, and are apparently referable to the western form. No doubt this bird meets and interbreeds with the Abyssinian form, *F. c. humeralis*, so that it is difficult to place these intermediate forms. The character of the tail-feathers is of some help, the western birds having rather more black on the outer rectrices.

Masindi, Budongo, and Bugoma in Uganda.

677. **Lanius collaris humeralis** Stanley. **Abyssinian Fiscal Shrike.**

? *F. c. uropygialis* Rchw.

I cannot see any constant characters for separating the Kilimanjaro birds from the North-east African race. The rump varies in colour from dark grey to grey and white! It appears, therefore, that no great reliance can be placed on this character.

Nairobi, Fort Hall, Naivasha, Kisumu, Kendu Bay.

678. **Lanius dorsalis** Cab. **Saddled Fiscal Shrike.**

Eight specimens from practically the type locality, and all constant in showing no white tips to the inner secondaries. This race must extend through the Ukamba country and to the east of Kilimanjaro, thence to Suk and north-west to Lake Stephanie, whence came specimens collected by Smith and Jackson. These latter specimens are interesting, because to the south-west of Rudolf at the Karoli Escarpment a form of *F. somalicus* is found. No doubt the two forms meet in this neighbourhood. There is one specimen in the Nairobi Museum from Simba which is white on the back.

M'buyuni, Teita, Tsavo, Simba, Thika.

679. **Lanius somalicus mauritii** Neum. **White-rumped Saddled Fiscal Shrike.**

Although Neumann described this bird from a single mounted specimen, his risky action has fortunately turned out all right. The specimens agree exactly with the type, except that the black of the head is not sharply differentiated from the grey of the mantle. The general coloration is like *F. somalicus*, but in this

form the rump and upper tail-coverts are white and the underwing-coverts dark ashy grey, not jet black. My specimens are in full clean plumage. I should like to point out that the Karoli Mountains or Escarpment are just south of Karoli Lake, and this, again, is south-east of Lake Rudolf, not in West Somaliland, as has been stated. My specimens of this rare Shrike, known hitherto from the type only, came from west of Rudolf.

Meuressi, on Upper Turkwell River.

680. **Lanius cabanisi** Hart. **Long-tailed Fiscal Shrike.**

F. caudatus Cab.

Unlike *Lanius excubitorius princeps*, these birds are resident in East Africa.

M'buyuni, Tsavo, Simba, Lamu, Kitui, Fort Hall, Kyambu.

681. **Lanius mackinnoni** Sharpe. **African Grey-backed Shrike.**

This species is particularly common in the Elgon district.

Busmasifa, Elgon, Elgeyu, and Entebbe in Uganda.

682. **Lanius excubitorius excubitorius** Prév. **African Great Grey Shrike.**

Lanius e. intercedens Neum.

5 ♂ ♀, wings 120–130 mm. This is the resident breeding bird of Kavirondo district and Elgon. These birds agree perfectly with Abyssinian specimens and birds from South Ethiopia, called by Neumann *intercedens*. I find, on reference to his original description and to his actual specimens, that the birds which he took to be *L. excubitorius excubitorius* are in reality *L. ex. princeps*, the small race which inhabits the Nile districts, passing south into the whole of Uganda, and migrating in numbers to East Africa in the winter. His specimens of *L. ex. intercedens* are really *L. ex. excubitorius*. Besides being larger, this race is also darker grey on the head and mantle than *L. ex. princeps* or *L. ex. böhmi: L. ex. böhmi* is merely a larger edition of *L. ex. princeps* Cab. I have come to this conclusion after nine years' observation in the field, and after going over the material in the Tring Museum as well. I have taken eggs and young.

Kisumu, Kibos, Elgon.

683. **Lanius excubitorius princeps** Cab. **Lesser African Great Grey Shrike.**

5 ♂ ♀, with nine birds in the Tring Museum collected by Turner at Naivasha, agree in colour and measurements with the birds from the White Nile district. They are smaller and paler grey than the Abyssinian bird, having a wing-measurement of 105–115 mm. During the winter large numbers of this race migrate to East Africa, especially to Lakes Nakuru and Naivasha. Owing to their migratory habits they have been mistaken for *L. e. excubitorius*.

Masindi, Mubendi, in Uganda; Naivasha in East Africa.

684. **Lanius excubitorius** Rchw. **Southern Intermediate Great Grey Shrike.**

Specimens of this race have been taken in the Kagera district of Uganda, and my present collection includes this race, from South Ankole and Mufumbiro, Budu in Uganda.

685. **Lanius minor** Gm. **European Lesser Grey Shrike.**

Between April 20th and 24th, 1918, these birds passed north through Tsavo in large numbers. They were in perfect full plumage.

Tsavo, Nairobi, Kimiriri, in East Africa; West Elgon in Uganda.

686. **Lanius senator niloticus** Bp. **Nile Woodchat Shrike.**

These birds have a wide wing-speculum and the bases of the rectrices white.

2 ♂ 1 ♀. Elgon.

687. **Lanius collurio** Linn. **European Red-backed Shrike.**

Twelve males from April are all normally coloured birds, the winter birds being pale brownish. A female shot 5.iv.1918 is coloured on the back somewhat like the adult male, the head being greyish, the feathers tipped brownish, the mantle reddish brown, but the underside is marked with wavy bars and the sides of the body washed with rufous. It agrees very well with the description of the variety which Shelley believed to be a different species and called *reichenowi*, from Dar-es-Salaam, and which is the same as *affinis* of Fischer. Common during the winter and early spring.

Mombasa, Changamwe, Maungu, Tsavo, Nairobi, Kisumu; also Masindi and Lugalambo in Uganda.

688. **Lanius collurio** subsp. ?

2 ♂ from Dar-es-Salaam have caused me some trouble. One is very like *L. collurio*, but the forehead is whitish, crown grey, mantle and back dark earth-brown, not reddish. Wing dark, with a large white speculum at base of primaries. Underside pale pinkish, 90 mm. Can this be *L. c. kobylini* ? The other has wings and back as in *L. cullurio*, but crown and neck brownish as in *L. phoenicuroides*. Loral spot black, ear-coverts black, with white streaks. Breast and flanks pinkish.

689. **Lanius cristatus isabellinus** Hempr. and Ehrenb. **Isabelline Shrike.**

4 ♂ 3 ♀, but only one male is fully mature.

Simba, Tsavo, Nakuru, Kisumu. January, December, March.

690. **Lanius cristatus phoenicuroides** Schal. **Brown-capped Red-tailed Shrike.**

I am not satisfied that all my eighteen birds belong to this race of *E. cristatus*. There are males in full fresh plumage which have no brown on the crown, but have the top of the head the same colour as the back; these are smaller than typical birds. Others, again, have greyish crowns, all being in good plumage. They have black ear-coverts, not brownish as in female birds.

Changamwe, Maungu, Tsavo, Fort Hall, Nairobi, Nakuru, Simba, Kisumu; and Mt. Moroto in Uganda.

691. **Corvinella corvina affinis** Heugl. **Yellow-billed Giant Shrike.**

3 ♂, 1 ♀, 1 juv. One specimen is very like the western typical race. Elgon, Simu River, in Uganda; Nandi, Kibigori, Lumbwa, in East Africa.

692. **Dicrurus modestus coracinus** Verr.

The typical bird does not occur. The race of Uganda is not so purplish blue on mantle and breast and is a recognisable form. This race I name :

693. **Dicrurus modestus ugandensis** van Som. **Uganda Velvet Drongo.**

Bull. B.O. Club, xli. p. 102, 1921.

The birds which inhabit Uganda from Toro to Elgon are more blue-black, less purplish black than typical " *coracina* " from Gaboon and Nigeria, of which there is a series at Tring. In size, the races are practically alike, though on an average the Gaboon birds are larger. The largest Uganda bird has wings of 135 mm.

Bugoma, Budongo, Lugalambo, Mabira, Elgon, in Uganda ; and Kavirondo in East Africa. Type ♂, Budongo, 10.xii.1918. Nineteen examined.

694. **Dicrurus ludwigi elgonensis** van Som. **Elgon Little Drongo.**

Bull. B.O. Club, February 1920.

The appearance of this small Drongo in the Elgon district is extremely interesting. In coloration it is very like *D. sharpei*, but it is larger. These specimens have been compared at the British Museum. They are darker, and lack the blue gloss of *sharpei*. The known range of this form is limited to North Kavirondo and Elgon.

695. **Dicrurus adsimilis divaricatus** Licht. **(Senegal) Pale-winged Drongo.**
D. adsimilis lugubris Hempr. (Nubia).
696. **D. adsimilis fugax** Peters (Nyassaland).

The coast birds are smaller, and on the whole more greenish, less bluish black. Uganda, ♂ 130–136, ♀ 120–130 mm. Coast to Simba, ♂ 117–127, ♀ 117–119 mm.

D. a. divaricatus: Masindi, Bugoma, Mubendi, Elgon, Kisumu. Ten specimens.

D. a. lugubris: Nairobi, Thika, Kitui, Simba. Five specimens.

D. a. fugax: Coast and Taru : Changamwe, Mombasa, Sagala, Tsavo, Taveta. Ten specimens.

D. a. divaricatus and *lugubris* are probably not separable.

697. **Corvus rhipidurus** Hart. **Fan-tailed Raven.**

(*C. affinis* auct.)

Occurs in fair numbers in the Suk and Turkana countries. I obtained it at Mt. Elgon.

698. **Corvus capensis minor** Heugl. **Slender-billed Crow.**

A very common species in the highlands and plains.
Nakuru.

699. **Corvus ruficollis** Less. 1831. **Brown-necked Raven.**

C. umbrinus Sund. 1838.
Seen in the Suk and Kavirondo country, but not common.

700. **Corvus scapulatus** Daud. **White-bellied Raven.**

Very common.
Nairobi, Fort Hall, and Kisumu.

701. **Corvus edithae** Phillips. **Somali Raven.**

Has been recorded from Lake Rudolf.

702. **Corvus albicollis** Lath. **White-necked Raven.**

Kisumu, Tsavo, M'buyuni.

703. **Corvultur crassirostris** Rüpp. **Giant Thick-billed Raven.**

Was obtained in Uganda by my collectors in 1912.

704. **Cryptorhina afra** Linn. **Long-tailed Crow.**

Occurs in the Nile Province of Uganda.

705. **Oriolus oriolus** Linn. **European Golden Oriole.**

About a dozen were taken in Nairobi. They arrive mid-September and October and return in April, but very few stay throughout the winter in Nairobi district. They prefer the open park country to forest. It would appear that the young male assumes an intermediate plumage, somewhat like that of the female, before becoming fully adult. These birds are particularly fond of the flowers of *Grevillia robusta*.

Nairobi, Tsavo, Nakuru, West Elgon, in Uganda.

706. **Oriolus auratus** Vieill. **West African Black-winged Oriole.**

A ♂ shot 17.xii.1917 is in full fresh plumage. It is not a common species in Uganda.

Mt. Moroto, Uganda.

707. **Oriolus notatus** Pet. **South African Golden Oriole.**

When comparing my series of twenty-two with the material in Tring, it was obvious that the East African birds were smaller than birds from Angola, the eastern birds having wings of ♂ 130–137, ♀ 130–135 mm., the western birds ♂ 140–147, ♀ 135–145 mm. As we have no Nyassaland birds, I am unable to say which are typical. Adult females apparently never lose the indications of striping on the breast and flanks.

Mombasa, Changamwe, Nairobi, and Fort Hall; also Masaka and Budu in Uganda.

708. **Oriolus brachyrhynchus laetior** Sharpe. **Grey-winged Black-headed Oriole.**

I consider that the grey-winged *Orioles* should be kept as a separate race from the *larvatus* group. Races of both groups are found together. The young differ markedly.

Two birds from Budongo appear to me to be hybrids between *O. l. rolleti* and *O. b. laetior*.

Bugoma, Budongo, Masindi, Mubendi, Sezibwa, Elgon, in Uganda.

709. **Oriolus larvatus rolleti** Salvad. **Nile White-winged Black-headed Oriole.**

Seven birds from Uganda, with wings of 125–135 mm., I consider the same as others from the White Nile with wings of 125–130 mm. These should bear the name given above; but the following birds from East Africa, which are larger, should, in my opinion, be recognised as a large highland race, while we have the name *O. l. reichenowi*, for a small race, inhabiting the coast and desert districts. The large birds and the small coast form meet in the Ukambani country.

Bugoma, Budongo, Sezibwa, Marich, Elgon.

710. **Oriolus larvatus kikuyuensis** subsp. nov.

These birds have wings of 135–147 mm. The range appears to be from North Ukambani north to Elgeyu Escarpment and east to Kenia. Type ♂, Nairobi, 2.x.1915, in my collection. Nine specimens compared.

Elgeyu, Nairobi, Escarpment, Kitui, Kyambu.

711. **Oriolus larvatus reichenowi** Zedl. **Coastal Black-headed Oriole.**

As far back as 1914 it was obvious to me that the Coastal Black-headed Oriole was smaller than the up-country bird, and in order to satisfy myself on this point I measured the material in the Nairobi Museum (thirteen specimens). These, together with nineteen recently collected skins, show a variation in wing-measurements from 115 to 125 mm., thus being smaller than the Kikuyu form.

Lamu, Manda, Mombasa, Maungu, Taveta, Voi, Tsavo, Kitui, Sagala.

712. **Oriolus percivali** Og.-Grant. **East African Black-tailed Oriole.**

These birds are inhabitants of the forests of the higher altitudes, and one seldom sees them in the open, park-like country where the large race of *O. larvatus* is principally found. I am not at all certain whether there is any interbreeding between these two birds, but one certainly finds specimens which appear to be hybrids. There is no doubt in my mind as to *O. percivali* being a good species distinct from *O. larvatus*, but whether it should be considered a subspecies of *O. nigripennis* I am not prepared to say; the main difference is that *O. nigripennis* has the tip of the primary coverts white—*O. percivali* not.

Kikuyu, Elgeyu, Elgon, in East Africa; Bale, Bumasifa, Bugoma, in Uganda.

713. **Buphaga erythrorhyncha** Stanl. **Red-billed Ox-pecker.**

A female was caught on its nest in a stone wall on 10.xii.1918. The nest was constructed entirely of ox, goat, and sheeps' hair, felted together.

Kisumu.

714. **Buphaga africana** Linn. **Yellow-billed Ox-pecker.**

Not at all common in East Africa, whereas the preceding is plentiful.

Kibigori.

715. **Perissornis carunculatus** Gm. **Wattled Starling.**

Two of nine males have fairly large wattles, but the others, though in full plumage and many in breeding condition, have the heads still covered with feathers, though wattles are present. As this species was particularly common near Nairobi, I shot and trapped over a hundred birds and examined them carefully. In no single instance were the head or throat wattles more than three-quarters of an inch long, and I found that the state of the wattles in no way indicates the condition of the reproductive organs. I am led to believe that the large wattles are only found in very old birds. I kept several males in captivity for two years and more, and although these had fairly respectable wattles under the feathers, they did not shed the head feathers at any time, though the bare patch at the side of the throat became bright yellow in the breeding season.

Kendu Bay, Lake Nakuru, Naivasha, Nairobi, and Masindi in Uganda.

716. **Spreo superbus** Rüpp. **White-banded Glossy Starling.**

The average wing-measurement of the East African adult males is 125 mm., the maximum 128 mm., i.e. larger than in birds from the White Nile district. There is, however, no difference in coloration.

Masindi, Gondokoro, Moroto, Kerio, in Uganda; Marich, Nakuru, Naivasha, Simba, Campi-ya-bibi, Lake Jipe, and Voi in East Africa.

717. **Spreo hildebrandti** Cab. **Hildebrandt's Glossy Starling.**

Some of my birds come from the type locality. In habits they are like *S. superbus*, but not quite so tame, nor do they frequent dwellings to the same extent. I wish to draw attention to the distribution of this bird and *S. shelleyi* in East Africa. I am of the opinion that these birds should be kept as distinct species, for although they overlap, they do not interbreed. I have examined a good many specimens and have seen no evidence of mixing.

Simba, Kitui, M'buyuni, Voi, Tsavo, Kibwezi, Campi-ya-bibi.

718. **Spreo shelleyi** Sharpe. **Shelley's Glossy Starling.**

The occurrence of this species in East Africa is of great interest, the typical birds coming from *N. Somaliland*. My birds, however, differ from the few Somaliland skins that I have been able to examine by being rather larger. They have wings from 110 to 117 mm., while four typical birds range from 105 to 110 mm. It is possible, therefore, that the East African race is larger. More typical birds are required.

Tsavo and Maungu. Eleven specimens.

719. **Spreo fischeri** Rchw. **Fischer's Grey Glossy Starling.**

Fairly common in the thorn-bush country, and extending up to Nairobi.

Maungu, Teita, Tsavo, Taveta.

720. **Speculipastor bicolor** Rchw. **Pied Glossy Starling.**

I have seen these birds in large flocks on Mombasa Island, on the wild fig trees which line the main thoroughfares. They appear to know, to a day, exactly

when the figs are ripe and make short work of stripping the trees bare. Their bold orange or crimson eyes are most conspicuous.

I was greatly surprised to discover this species just on the outskirts of Nairobi in 1917. They apparently had noticed during their wanderings a crop of wild tomatoes growing on the Municipal Dump. In two days there wasn't a ripe fruit in the whole ten-acre plot. The next time these birds were met with was in the dry country round Mt. Moroto in Turkana, Uganda. They were in full breeding condition.

The young birds in first plumage are interesting, because, except for their heavier build, they might easily be mistaken for adult *Spreo fischeri*. They have, however, a white wing-speculum, and the secondaries are tinged with purplish, not greenish. The grey of the throat and breast is not so extensive. These birds are the greatest wanderers of any species of glossy starling I know.

Mombasa, Magadi, Nairobi, in East Africa; Meuressi, Turkwell River, Mt. Moroto, Kobua and Kozibiri Rivers in Turkana, Uganda.

721. **Pholidauges sharpei** Jacks. **Sharpe's Buff-breasted Blue Starling.**

The young of this bird is distinguishable from the adults by being duller on the back and by having the whole underside speckled with arrow-shaped terminal spots to the feathers, thus being quite different from the young of *P. femoralis* Rchw.

This species is particularly common on the Nandi and Elgeyu ranges. The occurrence in the Kivu area is interesting.

Elgon, Nandi, Elgeyu, and Burnt Forest.

722. **Pholidauges femoralis** Rchw. **Buff-bellied Purple Starling.**

The seven specimens collected by Doherty at Escarpment in 1901 certainly belong to this species. These young birds differ from the young of *P. sharpei* in being somewhat smaller and much more heavily mottled and streaked on the underside, and in having the belly whitish.

When adults are obtained it may be shown that the Escarpment birds are different from the Kilimanjaro ones.

723. **Pholidauges verreauxi** Finsch and Hartl. **Verreaux's White-breasted Purple Starling.**

A common and widely distributed species. I have procured them at:

Manda, Changamwe, Samburu, Simba, Nairobi, Burnt Forest, Elgon, Kerio, Kacheliba; and Bugoma in Uganda.

724. **Pholidauges leucogaster** Gm. **White-bellied Purple Starling.**

Several examples have been taken in Uganda and East Africa, and these birds occur in localities occupied by *P. verreauxi* and do not interbreed.

Elgon. ♂ ♀, July.

725. **Lamprocolius corruscus corruscus** Nordm. **Black-bellied Glossy Starling.**

L. melanogaster Swains.

The typical bird does not occur within the limits of East Africa. The birds from these areas are the following subspecies:—

726. **Lamprocolius corruscus mandanus** van Som. **Northern Black-bellied Glossy Starling.**

Bull. B.O. Club, xli. p. 124, 1921.

The birds north from Dar-es-Salaam to Manda and Lamu are smaller and have much slenderer, smaller bills and have wings of 100–105 mm. The young bird is dull black on the head and mantle, with a green gloss, without any purplish tinge to the lower back, and it has the whole of the lower breast and abdomen dull brown-black. This does not agree with Shelley's description of the young of *corruscus*.

Lamu, Manda, M'koi, and Mombasa. Type from Manda, in my own collection.

727. **Lamprocolius purpureiceps** ? subsp. nov. **Eastern Lesser Purple-headed Glossy Starling.**

Five birds differ from typical *L. purpureiceps* from Gaboon in lacking the distinct purplish tinge to the wings. In eastern birds the wings are bluish, with the purple limited to the primaries, not extending on to the coverts. More material from Elgon is wanted.

Budongo, Lugalambo, Elgon, in Uganda.

728. **Lamprocolius chalybeus** Ehrenb. **Ehrenberg's Green Glossy Starling.**

2 ♂, Mt. Moroto, Uganda.

As contrary views have been expressed and published regarding the above name, I have gone very carefully into the question of the original description and plate. Neumann, in *Journ. f. Orn.*, 1905, states that the type is a small bird with wings of 122 mm., and says *L. chalybeus* cannot be used for the big bird, but for the small form, that is for *L. c. schraderi* Neum. Sclater and Praed in *Ibis*, July 1918, also make the same statement; Hartert in NOV. ZOOL., May 1919, has endorsed these views. I cannot understand this, as (1) Ehrenberg's type is a female; (2) the rump is coloured like the belly, and tinged purplish; (3) the wings measure 4·7 inches, Paris measure (not English), = 130 mm. (old way), modern method no doubt 132–133 mm.; (4) the size of the bill and foot as depicted on the plate, below the figure of the bird.

Now, all these characters are found in the females of the *large* species, *not the small*. Lord Rothschild and now Dr. Hartert agree with me in this matter.

As all the other names apply to this large bird, I admit *L. schraderi* Neum. for the smaller bird found in Abyssinia and the Nile district. Type in Tring.

In the south-east of Uganda and in East Africa north of the Taru and desert country we find a small race of *L. chalybeus* which Neumann has named :—

729. **Lamprocolius chalybeus massaicus** Neum. **Massai Green Glossy Starling.**

This race is smaller than *L. chalybeus chalybeus*, with wings ranging from 140 to 150, as compared with 145–157 mm. in typical race. Absence of or only slight indication of a shoulder-patch, and not dark well-defined ear-coverts.

As I find no adult males with larger wings than 150 mm., and as the largest female is equal in size to the smallest female of the typical form, I admit this bird as a race.

Kisumu, Nakuru, Naivasha, Nairobi, Fort Hall.

730. **Lamprocolius sycobius pestis** van Som. **Southern Glossy Starling.**

Bull. B.O. Club, xli. p. 124, 1921.

In the thorn-bush country of East Africa from Mombasa north to South Ukamba and Teita and ranging west to Lake Kivu and Tanganyika we have a race of *L. sycobius* which is larger than the typical southern African (Nyassaland) bird, having wings of 130–135 in males and 120–125 mm. in females. Abdomen purplish. Has a well-developed purple shoulder-patch and very clearly well-defined dark purplish-blue ear-coverts.

Mombasa, Samburu, Maungu, and N'di. Type, ♂ ad., Samburu, 18.x.1917. Tring Museum.

731. **Lamprocolius chalcurus** Nordm. **Violet-tailed Green Glossy Starling.**

Seven specimens obtained on the foothills of Mt. Elgon undoubtedly belong to this race. The whole of the rump and tail-feathers are purplish violet. The young bird is blackish above with a slight blue tinge. Underside dull sooty black with a green-blue sheen on the breast. Tail-feathers greenish blue with the basal half of centre pair violet purple.

Kerio River, Kimiriri River, Nyarondo.

732. **Lamprocolius chloropterus** Swains. **Golden-green Glossy Starling.**

1 ♂, 21.vii.1910, agrees with *L. chloropterus*, and not with *L. sycobius*. It is golden greenish on the wings and back. Probably a stray bird. These birds are great wanderers.

Buddu in Uganda.

733. **Lamprocolius purpureus amethystinus** Heugl. **Large Violet-headed Glossy Starling.**

Five specimens in beautiful condition. One male has the feathers of the forehead exceptionally long and directed forward, forming a distinct ridge.

Elgon and Bulamezi in Uganda; Soronko River and Nyarondo in East Africa.

734. **Lamprocolius splendidus** Vieill. **Great Fiery-breasted Glossy Starling.**

My seven birds come from a locality far removed from where the type of *L. splendidus* was obtained (mouth of Congo) and probably belong to a distinct race.

Mubango, Bugoma, Budongo, Mabira; Elgon and Nyarondo.

735. **Lamprotornis purpuropterus** Rüpp. **Green-headed Long-tailed Starling.**

Three of thirteen adult specimens lack the blue band on the breast, so that their lower surface is almost entirely violet-purple. As a rather worn specimen shows a somewhat similar change, I have no doubt this variation is due to wear.

Wings: ♂ 149–160, ♀ 135–150 mm. The young bird has the head black, with a faint purplish lustre to the crown. Mantle blackish with light purplish gloss. Wings bluish. Underside sooty black with slight bluish tips to feathers.

Bugoma, Budongo, Masindi, Busiro, Singo, in Uganda; South Elgon, Kisumu, Kenda Bay, and Kavirondo in East Africa.

736. **Cosmopsarus regius regius** Rchw. **Golden Long-tailed Glossy Starling.**

Eight birds in perfect condition, and typical.

Young birds in first plumage differ markedly from the adults. They have the head, mantle, throat, and breast greyish brown. Wings darker, glossed greenish. Lower breast and abdomen yellowish buff; tail blackish with greenish tinge.

Maungu, Tsavo, Taveta.

737. **Cosmopsarus regius donaldsoni** van Som. **Somali Golden-bellied Starling.**

Bull. B.O. Club, December 1919.

When I compared my birds with the series of Somali birds in the Tring Museum, it was at once evident that there were two races of this splendid starling. The North Somali birds from Wagar Mountains differ from the typical *C. regius* by being slightly smaller, in having smaller bills, and particularly in having the breast-band reddish violet-blue, not golden bronze-violet, and in having a well-defined dark ear-patch. Further, the underside is more orange-gold, darker than in typical specimens. Birds from South Ethiopia are like the North Somali birds, but are larger. With more material it may be possible to recognise a third race.

Marsabit and Lorian. 2 ♂♀, from Marsabit. Type in Tring Museum.

738. **Cosmopsarus unicolor** Shell. **Olive Long-tailed Glossy Starling.**

Lake Jipe, South-east Kilimanjaro.

739. **Onychognathus morio shelleyi** Hart. **Great Red-winged Starling.**

This race must be admitted. It is (as Dr. Hartert stated in *Cat. B. Mus.* Senekenb.) intermediate between two well-defined races, *A. m. morio* and *A. morio rüppelli*. No type locality is given in the original description and no type designated, but the author gives the name *shelleyi* to specimens from Mamboio and Ugogo in East Africa. I find in my series a male from Naivasha, which is only just a little smaller than Abyssinian specimens; but my Uganda birds are considerably smaller and agree with specimens from East Africa.

Mt. Moroto and Meuressi in Uganda; Naivasha, Nairobi, Narossera, Morogoro. Nine skins.

740. **Onychognathus morio montanus** van Som. **Elgon Great Red-winged Starling.**

Amydrus montanus, *Bull. B.O. Club*, December 1919.

Differs from *O. m. morio* and *O. morio rüppeli* in having the bill as long as in the Abyssinian race but more slender, and from the typical form in being slightly larger and having the bill longer and slenderer. Wing, 155–160 mm.

Mt. Elgon, at 9,000 feet. 5 ♂♀, ad., 1 juv. Type, 15.iii.1916.

741. **Amydrus walleri** (? subsp.). **East African Small Red-winged Starling.**

I have compared my four birds with the type and find that they agree fairly well, but the type is so poor a skin as to be almost useless for comparison. I doubt if *A. nyassae* is a good race. The type is certainly a large bird.

Mt. Kenia.

742. **Amydrus walleri elgonensis** Sharpe. **Elgon Little Red-winged Starling.**

Wings, 123–127 mm. in the males. In the Kivu district we find a representative with a wing of 120–123 mm, but no other difference that I can see. They are larger than the birds from Camaroon which have been called *A. w. preussi*. The type of *elgonensis* is a small female.

Elgon, Nandi.

743. **Cinnamopteryx tenuirostris** Rüpp. **Slender-billed Red-winged Starling.**

Wings, 155–157 mm., smaller than Abyssinian birds. The young in first plumage are dull sooty black above and below, with a bluish wash on the wings and tail; the cinnamon speculum is present on the primaries.

Nairobi, Kyambu, and Fort Hall.

744. **Poeoptera stuhlmanni** Rchw. **Slender Purple Starling.**

P. greyi Jackson.

We have no typical birds to compare with this series, so I can give no opinion as to whether they differ or not. These specimens have wings of 100–105 mm.

Elgon and Elgeyu.

745. **Poeoptera kenricki** Shell. **Slender Bronze-green Starling.**

Should, I think, be kept as a distinct species from *P. stuhlmanni*.

Lake Jipe, East Kilimanjaro. ♂♀, December.

746. **Textor albirostris albirostris** Vieill. **White-billed Buffalo Weaver.**

These birds undoubtedly belong to the *albirostris* group, as evidenced by the two June males which are in full breeding condition and have the base of the bills much swollen and enlarged, pinkish yellow. They agree perfectly with specimens from North Abyssinia, Eritrea, and White Nile district, and although the bills are not as long as in these birds, yet the bases are just as swollen. As *T. scioanus* was described from Shoa and South Abyssinia, it appeared to me rather curious that one should get a typical *T. albirostris* in the South Rudolf and Suk district. I therefore laid out in geographical order all the material in Tring together with my excellent series of these Black Weavers. It was then evident that there were two groups or species, with so many races, judging by the distribution, the character of the bills, and of the young and adult females.

Moroto, Kerio River, and Suk Marich.

747. **Textor niger scioanus** Salvad. **Northern Red-billed Buffalo Weaver.**

Three birds belong to this race of *T. niger*. They have *smooth, coral-red bills*, and the inner webs of the primaries greyish or whitish. They agree well with the series in Tring from South Ethiopia.

Kobua River, Lake Rudolf.

748. **Textor niger nyansae** Neum. **Black-winged Coral-billed Weaver.**

Neumann has boldly described this race from *one single male* specimen from Kavirondo. Whether he is justified or not, I am unable to say; but it is true that my single bird from Kavirondo agrees perfectly with his description, and has *black inner webs* to the primaries. As my specimen supports his bird, I am forced to admit this race.

Kibigori, Kavirondo.

749. **Textor niger intermedius** Cab. **East African Coral-billed Buffalo Weaver.**

My series includes breeding birds; they have *smooth, coral-red bills,* the males *greyish or whitish inner webs* to the primaries.

Taveta, Tsavo, Kitui, Simba.

NOTES ON THE ALBIROSTRIS AND NIGER GROUPS.

The characters of the two groups of *Textors* are as follows:—

(1) ♂, white or pinkish yellow bills, with *bases greatly swollen* in the breeding season. ♀, black like the males but duller, bills sometimes slightly swollen. Young like the females but more brownish. INNER WEBS OF PRIMARIES BLACK. *Textor albirostris albirostris* and *T. a. senegalensis.* (The type of *T. senegalensis* is a young ♂ or ♀. The race must be admitted because the Senegal birds have a much larger bill than typical *T. albirostris.*)

(2) Bills coral-red and *smooth, not swollen at base* in breeding season. Females not like males, showing some white on breast. ♂, *distinct white wing-patch or inner webs white or greyish,* except *T. n. nyansae.* Young quite different from adults: brownish above, white below, with black-brown streaks and mottlings. *Textor niger niger, T. niger intermedius, T. niger scioanus,* and *T. niger nyansae.*

T. n. niger: South Africa north to Limpopo and Zambesi, and north-west to Angola.

T. n. intermedius: Tanganyika Territory north to Kenya Colony, as far as Baringo.

T. n. scioanus: South Abyssinia, Rudolf to West Somaliland.

T. n. nyansae: Kavirondo and shore of Lake Victoria.

750. **Dinemellia dinemelli** Rüpp. **White-headed Giant Weaver.**

D. ruspolii Salvad.

I cannot recognise *D. ruspolii* of Salvadori. Specimens from Somaliland *are just as large* as birds from Abyssinia, East Africa, and Uganda. In my series the wings vary from 112 to 123 mm.

Nile Province, Moroto, Kacheliba, Kerio, in Uganda; Nyarondo, Simba, Tsavo, Voi, Taveta, Campi-ya-bibi, Maungu, Masongoleni, in East Africa.

751. **Plocepasser donaldsoni** Sharpe. **Somali Grey Sparrow Weaver.**

I have compared these with a cotype in Tring. My birds are rather greyer, more mottled on the breast, and the cheeks are distinctly buff, not white. They are also larger. Apparently a rare bird.

Northern Guasso N'yiro, near Archer's Post.

752. **Plocepasser superciliosus** Cretzschm. **Red-crowned Sparrow Weaver.**

Four birds agree with the specimens in Tring from Abyssinia and Lake Albert (Seth-Smith coll.). My birds in fresh plumage are slightly darker.

Mt. Moroto in Uganda; Kerio River in East Africa.

753. **Plocepasser mahali melanorhynchus** Rüpp. **Black-crowned Sparrow Weaver.**

My Uganda and Suk birds agree well with typical specimens, but I find that three specimens from Naivasha and Thika are rather darker on the back and blacker on the crown. A larger series may show this to be constant.

Masindi, Meuressi, Turkwell, Kacheliba, and Kobua River in Uganda; Kerio, Naivasha, Fort Hall, Kitui, and Simba in East Africa.

754. **Sporopipes frontalis loitanus** van Som. **Loita Scaly-headed Finch.**

Bull. B.O. Club, xl. p. 55, 1919.

These birds differ from the Senegal and Abyssinian races by being much darker on the back, and in having the breast and flanks washed with grey. Wings, 65–70 mm. Uganda birds are slightly smaller than East African ones (wings 62–66 mm.), but they agree in colour. My Uganda birds are mostly females.

East Kilimanjaro, north through Loita and Ukambani to Turkana and the Nile (Gondokoro), Taveta, Tsavo, Simba, Loita (type), Kitui, Suk, Moroto, and Gondokoro.

755. **Malimbus malimbicus crassirostris** Hart. **Uganda Crested Black Weaver.**

Nov. Zool. 1919, p. 140, Unyoro.

The character of the heavier bill, mentioned by Hartert, does not hold good, but the race is distinctly recognisable because the red of the head is more crimson with a magenta tinge, the crest much more developed, and the posterior half black in adult breeding males. My birds are from the type locality.

Bugoma and Budongo Forest.

756. **Malimbus rubricollis centralis** Rchw. **Uganda Red-hooded Black Weaver.**

It is of interest to note that young birds have the throat distinctly reddish, yet this part in adults is black. I am of the opinion that the birds from Angola will have to be separated. The red of the neck does not extend to the upper mantle, as it does in *M. r. centralis*.

Bugoma, Budongo, Masindi, Sezibwa, Lugalambo, West Elgon, in Uganda; South Elgon and Nyarondo in East Africa.

757. **Anaplectes rubiceps** Sund. **Red-headed Weaver.**

A ♂ collected by Loveridge is interesting as it is much paler red than normal.

Morogoro.

758. **Anaplectes jubaensis** van Som. **Crimson Weaver.**

Bull. B.O. Club, xl. p. 94, 1920.

These Crimson Weaver birds appear to be limited to the region of the Juba River. They were collected by A. Blayney Percival in 1912.

759. **Anaplectes melanotis** Lafr. **Black-cheeked Red-headed Weaver.**

A. blundeli and *erythrogenys* are synonyms.

Much variation exists in the amount of black on the chin, the intensity of the red, and the amount of this colour on the mantle and breast. One male has the wings edged with yellow, not red. From the localities given below, it will be seen that my series covers a fairly large area, and the birds from various places do not differ in any important manner.

Lake Jipe, Sagala, Teita, Voi, Tsavo, Simba, Ruiru, Kibigori, Kisumu, Elgon, in East Africa; Kerio River, Mt. Moroto, Singo, and Gulu in Uganda. 16 ♂, 7 ♀.

760. **Symplectes kersteni** Finsch. **Coast Black and Yellow Weaver.**

This is not a common species and does not appear to go very far inland. Mombasa. 1 ♂, 7.iv.1917.

761. **Symplectes mentalis** Hartl. **Grey-backed Weaver.**

S. nandensis is synonym.

I cannot see the supposed difference between the birds from Buguera and Nandi. Although I have collected in Uganda for a considerable time, I have not taken this species between Elgon and Toro, yet the birds are not separable. The young birds are much like the adult, but duller above, and the yellow of the underside is not so pure, duller.

Nandi, West Elgon, North Kavirondo.

762. **Phormoplectes insignis** Sharpe. **Chestnut-headed Yellow-backed Weaver.**

I have examined the type of *P. frater* Neum. from Kivu, and it appears to me that the only character separating this female from females of *P. insignis*, namely the yellow chin, is variable. In my series I possess a female with just two black feathers on the chin, otherwise it is exactly like *P. frater*. The sequence of plumages of *P. insignis* ♂ is as follows :—

I. Head and neck olive-green, bill horny brown; mantle yellowish in centre; wings dull blackish, feathers edged with tawny ochraceous; rump olive-yellow. Underside, including throat, dull yellow, more ochraceous on belly and flanks.

II. Head black like adult female or some brown present; throat yellow or with one or two black feathers; mantle bright yellow; wings blacker. Underside brighter yellow; rump yellow; bill blackish brown.

III. Head mottled black and chestnut; remainder of plumage like adult, but longest upper tail-coverts olive green.

IV. Crown entirely chestnut and longest upper tail-coverts black.

I have one male in Stage III which has the forehead chestnut while the rest of the crown is brownish yellow, as in *P. preussi*. It is most extraordinary that so many birds exhibiting such close relationship and such slight differences should occupy the same areas and not interbreed. I refer to *P. insignis*, *P. frater*, *P. dorsomaculatus*, and *P. preussi*, all found in the area between the central lakes and Camaroons! Some of my female birds have the mantle spotted with black and closely resemble the females of *P. dorsomaculatus*.

Kyambu Forests, Nairobi, Kenia, Molo, Burnt Forest, Elgeyu, Maraquet, Elgon! Nestlings in October.

763. **Otyphantes reichenowi** Fisch. **Reichenow's Black and Yellow Weaver.**

These birds agree absolutely with typical specimens. The females have the head and mantle jet black. Young birds in the second plumage have the mantle mottled black and olive-green, but the bills are blackish brown, and they do not breed in this condition. Very young birds have the entire crown and mantle olive-green, the latter streaked black. Bills horny brown.

Kilimanjaro, Kitui, Simba, Kyambu, Nairobi, Naivasha, Nakuru, Molo, Elgeyu, Maraquet. Nestlings in July and September.

764. **Otyphantes reichenowi** ? subsp. **North Elgon Weaver.**

In 1915 and in 1917 I collected female breeding birds from North and West Elgon which did not have jet-black backs, but striped black and olive-green mantles and jet-black bills, and I put them into a drawer of *O. stühlmanni* with a note to the effect that these birds had larger black stripes on the mantle than typical *O. stuhlmanni*. Later I received a male and two females from Kerio River. The male is just like *O. reichenowi*, but the females are like the birds referred to above. In comparing these birds at Tring I was surprised to find a male and two females collected by Turner for Meinertzhagen, south of Elgon, which exactly agree with my birds. The females have mottled black and green backs and jet-black bills. On looking up the literature I found Mearns's description of *O. reichenowi fricki* from South Abyssinia as follows :—

Adult males not to be distinguished from *O. r. reichenowi*, but the adult breeding females differing from females of *O. r. reichenowi* by having the mantle olive-green with large distinct blackish streaks, more heavily than in *O. stuhlmanni*, and Mearns referred to this race two specimens collected by Neumann in South Abyssinia. These birds are in Tring and bear out Mearns's statements. My breeding females do not, however, agree with Neumann's two birds; they are more heavily mottled with blackish and one is considerably darker. Are my birds *reichenowi*, and would they develop jet-black backs, or are they connecting links between *reichenowi* and *O. r. fricki* ? I am inclined to the latter view, because my birds were breeding.

West Elgon, South Elgon, Kerio River.

765. **Otyphantes stuhlmanni** Rchw. **Stuhlmann's Black-crowned Olive Weaver.**

Two males show indications of a distinct yellow forehead. The whole of the undersides are yellow (cf. *O. emini* subsp.). Does *O. stuhlmanni*, at any time of its life, develop a yellow forehead—for instance, when very old ? There is a good series in Tring, and not one shows this character; further, this series shows, as does mine, that *O. stuhlmanni* and *O. emini*, or rather the southern race of *emini*, occupy the same territory.

Budu, Kigezi in South Ankole; Masindi, Busiro, Entebbe, Sezibwa, Mabira, Lugalambo, and West Elgon Plains, in Uganda.

766. **Otyphantes emini budongoensis** van Som. **White-bellied Green-mantled Weaver.**

Bull. B.O. Club, xli. p. 123, 1921.

I was surprised to find that when I compared my birds with the series of *O. emini* in Tring, all the Tring specimens had black backs, including the *type*

and topo-types, as also the birds from South Ethiopia which Ogilvie-Grant named *O. zaphiroi* (thus *O. zaphiroi* becomes a synonym, in spite of what Grant wrote in *P.Z.S.* 1910). Now, not one of my adult breeding birds has a black back, but in reality is only slightly more boldly striped than *O. stuhlmanni* and only differs from this bird by having a wide golden crown *and a white or buff belly.* It is unfortunate that the type of *O. emini* came from so far south as Agaru, thus practically on the borders of the southern race which I have described. I am convinced, however, that the two birds are distinct.

The sequence of plumages from young to adult in the male is as follows :—

I. Head greenish olive-grey; ear-coverts blackish; neck-mantle and rump greyish, with dark centres to the feathers; tail greenish; wings blackish-olive with pale greenish yellow edges; throat yellow; rest of underside buff; bill horn brown.

II. Head blackish; forehead with some yellow; mantle greyish, strongly washed with olive, centre markings pronounced; rump greyish. Underside yellow to lower breast, belly and under tail-coverts buff to whitish.

III. Forehead broadly yellow, rest of head black; mantle olive-green with dark blackish centres to the feathers; rump and tail-coverts olive-green with yellowish wash. Underside from throat to breast bright yellow; belly to under tail-coverts pale creamy buff. Females are like the males, but they have the crown and sides of the head black.

A specimen collected by Dr. Ansorge at Masindi agrees with my birds in Stage II.

Masindi, Bugoma, Budongo. Type: ♂ ad., Busindi (Budongo), 7.vi.1919. Tring Museum.

767. **Hyphanturgus stephanophorus** Sharpe. **Yellow-faced Black Weaver.**

The sequence of plumage in the male is as follows :—

I. Crown olive-black; wings and mantle dull sooty black; upper tail-coverts and lower rump olive; sides of head and throat brownish ochre; lower breast olive-ochre.

II. Crown yellow; cheeks ochre-yellow, so also the throat; rest of plumage blackish, darker on mantle, wings, and tail.

III. Crown and cheeks yellow; throat black—as rest of the plumage.

The change takes considerable time; many birds commence breeding before having attained full mature plumage.

Elgon, North Kavirondo, Nandi, Burnt Forest, Marakwet, Molo, and Aberdares in East Africa; South Ankole in Uganda.

768. **Hyphanturgus nigricollis melanoxanthus** Cab. **Coast Black-mantled Yellow Weaver.**

I consider this bird to be merely a black-backed race of *H. nigricollis*, the Uganda and central lake form not overlapping the coastal and East African race. The Uganda birds I refer to a new race intermediate between the true *nigricollis* of West Africa and *melanoxanthus* of East Africa. The records of *H. melanoxanthus* from West Uganda are erroneous and refer to this new subspecies.

Lamu, Manda, Changamwe, Mombasa, Maungu, Masongoleni, Teita, Tsavo, N'ziu, Kitui, Magadi.

769. **Hyphanturgus nigricollis vacillans** van Som.

Heteryphantes nigricollis vacillans, *Bull. B.O. Club*, xli. p. 123, 1921 (Budongo).

Whereas all the typical birds are decidedly East African, my birds, with the exception of not fully adults, have the mantle olive-black to black—darker, more blackish than in *H. n. nigricollis*, but not jet-black as in *H. n. melanoxanthus*. This form stands thus between *nigricollis* and *melanoxanthus*.

Kigezi, South Ankole, Bugoma, Budongo, Mubendi, Mabira, Elgon, Entebbe, in Uganda; North Kavirondo, Taveta, Bukoba.

22 ♂, 16 ♀, 4 juv., January, February, July, August, December.

770. **Hyphanturgus ocularius crocatus** Hartl. **Uganda Spectacled Weaver.**

H. o. abayensis Neum.

This is a good race and very constant in its characters.

The range is from Uganda to Kivu and east to Elgon and Kavirondo: Masindi, Unyoro, Budongo, Busiro, Mubendi, Entebbe, Sezibwa, Jinja, Elgon, in Uganda; Soronko, Kisumu, Kavirondo, in East Africa.

771. **Hyphanturgus ocularius suahelicus** Neum. **East African Spectacled Weaver.**

This race is very much richer-coloured than the Uganda form and always constant. Coastal birds are slightly smaller than up-country specimens.

Changamwe, Voi, Teita, Taveta, Simba, Nairobi, Nakuru, Naivasha, Fort Hall, Kenia.

772. **Hyphanturgus aurantius rex** Neum. **Uganda Golden Swamp Weaver.**

Not very widely distributed. A good race.

My two birds, ♂ and ♀, are from the type locality, Entebbe.

773. **Xanthopilus castanops** Shell. **Brown-faced Golden Weaver.**

Masindi and Bira in Uganda.

774. **Sitagra pelzelni** Hartl. **Little Slender-billed Black-faced Weaver.**

I have again gone over the material reported on in 1916, and with my additional material I must emphasise that the Kisumu birds have longer wings and longer bills than those from Entebbe. I hope to get more material from Kisumu to prove that Kisumu birds belong to a bigger race.

Entebbe, Kigezi, South Ankole, in Uganda (smaller); Kisumu, East Africa (larger).

775. **Sitagra luteola luteola** Licht. **Little Thick-billed Black-faced Weaver.**

The three males from the dry scrub of the Turkana country cannot be separated from birds from South Ethiopia or the Nile, and these latter agree with typical Senegal specimens. They have the mantle rather yellowish green and very indistinctly streaked, the hind part of the crown yellow. Birds from Suk are darker.

Moroto, Meuressi, Kobua River, Rudolf, and Masindi in Uganda.

776. Sitagra luteola kavirondensis van Som. **Southern Thick-billed Little Black-faced Weaver.**

Bull. B.O. Club, xli. p. 123, 1921. Type Soronko River.

Birds from south of Elgon and thence along the Nandi Escarpment and to south of Lake Victoria are slightly darker above, more greenish, with more decided striping to the mantle, and the nape is less bright yellow, with indications of stripes. They nest in the scrub, well away from water, thus contrasting with *S. pelzelni*, which nests in the papyrus swamps. Is this bird a true *Sitagra* ?

Soronko River, South Kerio, Kacheliba, Kisumu, Kibigori, also Entebbe.

777. **Xanthophilus bojeri bojeri** Fischer. **Coast Golden Weaver.**

These birds show great variation in the intensity of the yellow, and the orange on the crown. Lamu and north coastal birds have rather deeper chestnut breast-collars than Mombasa specimens, but my series is insufficient to create a separate race. I would invite particular attention to the localities where I have collected these birds and those of the next two forms. The eggs are olive-green, uniform or freckled with brownish.

Lamu, Manda, Changamwe, Mombasa, Tsavo, Voi, Taveta, Lake Jipe. Forty-seven specimens, mostly males.

778. **Xanthophilus bojeri alleni** Mearns. **Inland Golden Weaver.**

This race is barely recognisable, but is rather larger than coast birds, and has the upper surface and underside tinged with olive-green, not so bright yellow. Wings, ♂ 78–80, ♀ 70–72 mm.

Yatta Plains, N'ziu River, North Ukamba, Embu, and Archer's Post.

779. **Xanthophilus castaneiceps** Sharpe. **Brown-naped Golden Weaver.**

X. schillingsi Rchw.

X. schillingsi is certainly not separable. It is extraordinary that this species, which differs from *X. bojeri* in a very slight manner, should occupy part of the same territory.

Tsavo, Taveta, and Lake Jipe. 13 ♂, 4 ♀.

780. **Xanthophilus aureoflavus** Smith. **Brown-faced Olive-golden Weaver.**

These birds live alongside *X. bojeri* and *X. castaneiceps* in the Taveta and Teita districts. The females are quite distinct, ♀ *X. aureoflavus* having a whitish abdomen. 12 ♂, 2 ♀.

Bura, Taveta, Lake Jipe.

781. **Xanthophilus xanthops camburni** Sharpe. **Large Yellow Weaver.**

This race was separated from *X. xanthops* because of its smaller size and richer colour. The type is a small bird, a female, but the males are really as large as *X. xanthops* ; however, as the colour-character holds good, the race can be maintained for the birds inhabiting British East Africa, north to Kisumu. Wings, 93–100 mm.

Kenia, Fort Hall, Nairobi, Kitui, Fort Ternan, and Kisumu.

782. **Xanthophilus xanthops** (? subsp.). **Uganda Large Yellow Weaver.**

8 ♂ and 5 ♀ from Uganda seem to be slightly smaller, having wings of 90–96 mm. Kivu birds have longer wings again, and perhaps stumpier bills.

Masindi, Budongo, Bugoma, Lugalambo, Ankole, and Budu, in Uganda.

783. **Hyphantornis cucullatus abyssinicus** Gm. and **Hyphantornis cucullatus femininus** Og.-Grant. **Large Black-headed Weaver.**

I am not quite certain if *femininus* will be separable, because I find that the birds from East Uganda and Elgon district are hardly separable from Abyssinian specimens, and they merge into the West Uganda race which has been called *H. c. femininus*. On examination of the series in Tring and my own specimens, I find that authentic breeding females of all the *cucullatus* races have *yellow breasts*, and that young females and males have the belly buffy. With regard to the coloration of the head, I find amongst my birds specimens agreeing perfectly with *H. c. bohndorffi*, *H. c. femininus*, and *H. c. abyssinicus*, the prevailing forms being the latter two. I do not know where to draw the line between these races, but suggest that the East Uganda and Elgon birds should provisionally be placed under *H. c. abyssinicus* and the central and western Uganda birds under *H. c. feminina*.

H. c. abyssinicus: Elgon, Mumias, Kisumu, and Kendu Bay. 4 ♂, 6 ♀.

H. c. femininus: Masindi, Bugoma, Budongo, Entebbe, West Busoga, and South Ankole in Uganda. 10 ♂, 7 ♀.

784. **Hyphantornis nigriceps nigriceps** Lay. **Black-headed Weaver.**

The birds from the coast are paler yellow than up-country specimens, but my series is not sufficient to show that this is constant. One Nairobi male has the black mottling of the mantle very large and distinct, thus giving the bird a very dark appearance, very like a bird from Angola which possibly belongs to a darker race..

Changamwe, Simba, Nairobi, Kikuyu.

785. **Hyphantornis nigriceps graueri** Hart.

This is an excellent race. It probably extends into the Kigezi district of Uganda.

786. **Hyphantornis intermedius intermedius** Rüpp. **Abyssinian Lesser Black-faced Weaver.**

2 ♂ 1 ♀ agree well with typical birds; they have the abdomen clear pale yellow, and wings 65–70 mm. This type of bird is found in the north-eastern part of Uganda and Turkana, west of Lake Rudolf, and probably just south of that lake.

Moroto and North Turkana.

787. **Hyphantornis intermedius kisumui** van Som. **Kavirondo Lesser Masked Weaver.**

Bull. B.O. Club, xli. p. 122, 1921.

Distinguishable from the typical form by being larger, having wings of 70–77 mm., and by having the underside darker more washed with orange, and having

the abdomen washed with this colour, not pure bright yellow. The amount of chestnut on the back of the head varies, and some birds have this area deeply coloured, others rather paler.

South Kavirondo to North Ukambani and Simba: Kendu Bay, Kisumu (type), Simba, Kitui.

788. **Hyphantornis intermedius littoralis** van Som. **Coastal Lesser Masked Weaver.**

Bull. B.O. Club, xli. p. 123, 1921.

This race is limited to the coast belt and Taru district. It is smaller than *kisumui*, underside lighter, bright yellow, even brighter than in *H. i. intermedius*, from which the ♂ differs chiefly in its lighter, much more yellow nape. Wings, 62–70 mm. The single female is brighter yellow on the underside than typical Abyssinian birds. The birds are not *H. cabanisi*, as has been supposed.

Changamwe and Malindi. Type: Changamwe.

789. **Hyphantornis heuglini sukensis** subsp. nov. **Plain-backed Masked Weaver.**

This bird is coloured like *H. heuglini heuglini*, but smaller, with a smaller bill. It is apparently the British East African representative. Wings, 78 mm.; culmen, 18 mm. long, 7 mm. deep.

Elgon, Kimiriri River, and Kerio River (type). 2 ♂, 15.iv.1917; 1 ♀ and 1 juv., 28.v.1916.

790. **Hyphantornis spekei** Heugl. **Speke's Masked Weaver.**

This common species apparently does not alter throughout its distribution, but one occasionally comes across a specimen which shows an almost blackish back, due to super-pigmentation.

Simba, Kitui, Nairobi, Naivasha, Nakuru, Kisumu.

791. **Hyphantornis vitellinus uluensis** Neum. **Little-masked Weaver.**

I agree with Neumann that these birds are not typical *H. v. vitellinus* from Senegal, but not in the manner indicated by him. The principal difference is the much darker and more striped mantle, which is decidedly more greenish, and the underside is deeper yellow. Birds from the Nile Province of Uganda appear also different.—I have not sufficient Somali material, but *H. v. uluensis* appears very close to *H. lineolatus* Shell., judging by a couple of Somaliland skins.

River N'ziu, Simba, and Lodomeru (A. B. Percival).

792. **Hyphantornis jacksoni** Shell. **Jackson's Yellow-backed Black-headed Weaver.**

At first glance it might appear extraordinary that two birds superficially so alike as *H. jacksoni* and *H. dimidiatus fischeri* should be found side by side, but an examination of the respective females at once distinguishes them. The females of *H. jacksoni* are decidedly yellowish underneath and have bright yellow inner webs to the primaries and secondaries (this latter character helping to distinguish them from females of *H. intermedius distinctus*). It will also be seen that *H.*

jacksoni have red eyes and *H. dimidiatus fischeri* brown or ochre-brown. Birds from the type locality, Lake Jipe, are rather darker than northern birds.

Bura, Lake Jipe, Baringo, Kisumu, Kerion River, in East Africa; Jinja, Entebbe, and Masindi in Uganda.

793. **Hyphantornis dimidiatus fischeri** Rchw. **Olive-mantled Black-headed Weaver.**

? = *H. dimidiatus dimidiatus* Salvad.

It appears to me very doubtful whether the birds from Lake Victoria are the same as the North Abyssinian species, so I prefer to recognise Reichenow's name for the southern bird. No Abyssinian birds are, however, available for comparison. I have always found *H. d. fischeri* very partial to water, and it nests in the papyrus and on trees growing in the water, not in the scrub away from water. The type of *H. fischeri*, which came from south of Lake Victoria at Kagehi, was collected along with typical *H. jacksoni*. There are in Tring Museum specimens of *H. jacksoni* collected by Fischer at this place, which had been first named *H. dimidiatus* by Reichenow. Apparently Reichenow afterwards recognised that there were two distinct birds and named the dark mantled bird *H. fischeri*. Until the type of *H. dimidiatus* is examined, it will be impossible to say which of the two Kagehi birds is nearest to it. My series of males in breeding plumage is very uniform. There are two birds which are not typical, and they agree absolutely with *H. capitalis*. The females of *H. d. fischeri* have the underside whitish buff, more deeply buff about the breast and flanks. *Young* birds of both sexes are deep buff on the underside, the abdomen being whiter.

Nile Province, Gondokoro, Bugoma, Budongo, Masindi, Kigezi, South Ankole, Entebbe, Jinja, Kagera, in Uganda; Kisumu, Kendu Bay, and Kibos River in East Africa. 32 ♂, 13 ♀, 5 juv.

794. **Hyphantornis rubiginosus** Rüpp. **Black-headed Chestnut Weaver.**

I have not enough material to judge whether these birds are true to type or not. The capture in *Nairobi* is of interest.

Samburu, Tsavo, Simba, N'ziu, Kitui, Nairobi, and Moroto.

795. **Hyphantornis weynsi** Dubois. **Weyns's Yellow-bellied Black Weaver.**

As no birds from the type locality are available for comparison, I cannot say whether these birds are typical. It is not a very common species.

Bugoma, Lugalambo, Mubendi, Bumasifa, in Uganda. 6 ♂ 2 ♀.

796. **Hyphantornis golandi** Clarke. **Coast Black-flanked Weaver.**

The type was procured north of Mombasa.

797. **Melanopteryx nigerrimus** Vieill. **Black Weaver.**

I have no specimens from the type locality for comparison; the wings of my birds measure 80–90 mm.

Budongo, Bugoma, South Ankole, Masindi, Kawala, Entebbe, Mubango, Sezibwa, Elgon, in Uganda; and North Kavirondo in East Africa. Common.

798. **Cinnamopteryx interscapularis** Rchw. **Yellow-backed Brown-breasted Weaver.**

C. mpangae Grant.

C. rufoniger Rchw.

I wish to emphasise the unfortunate muddle which has occurred over this bird in its various plumages, and because the sexes differ. In *Ibis*, 1915, I drew attention to the fact that Reichenow had described the female as "*interscapularis*," and shortly after Og.-Grant described the male as "*mpangae*"; and I now find that at the same time Reichenow named the young *rufoniger*. My specimens show this conclusively. The three types came from the same locality. The young female has the head chestnut, the lower neck tinged yellowish, the lower surface brownish tinged blackish, thus agreeing well with the plate of *C. rufoniger* in Reichenow's Atlas.

Bugoma, Budongo, Kyetume, Mubango.

799. **Pachyphantes superciliosus** Shell. **Thick-billed Masked Weaver.**

P. pachyrhynchus Rchw.

P. omoensis Neum.

Much variation exists in the adult males. I doubt if these birds can be separated from the typical Senegal ones. I have examined the type (a *single* female) of Neumann's *P. omoensis*. In spite of what Dr. Hartert has written (NOV. ZOOL. 1919) I am unable to recognise this race; I can match this bird absolutely, both in size and coloration, with birds from Moroto and Elgon, and therefore place this name as a synonym.

Masindi, Bugoma, Budongo, Entebbe, Jinja, Moroto, Elgon, and Kisumu.

800. **Amblyospiza albifrons melanotus** Heugl. **Heavy-billed Swamp Weaver.**

A. aethiopica Neum.

I cannot accept *A. aethiopica* of Neumann, and am satisfied that it is a synonym of *A. melanotus*. I have to endorse the remarks I made on this bird in *Ibis*, 1916, as additional material strengthens my view.

A. melanotus extends into East Africa as far as South Kavirondo and *A. a. unicolor* north into Kisumu, so that we find in this district birds of both types. They no doubt interbreed.

Masindi, Budongo, Bugoma, Entebbe, Mubango, Kyetume, Lugalambo, in Uganda; Elgon, Kisumu, Fort Ternan, in East Africa.

801. **Amblyospiza albifrons unicolor** Fisch. and Rchw. **Coast Heavy-billed Black Swamp Weaver.**

The series is fairly constant, though two males show some brown on the head. Like so many coastal forms, this race is small; wings, ♂ 88–91 mm. The race extends inland through the dry thorn-bush to the region of Lake Jipe and base of Kilimanjaro. In the highlands we find a larger, heavier bird, showing a strong tendency to becoming almost uniform black in the old males.

802. **Amblyospiza albifrons montana** van Som.

Bull. B.O. Club, xli. p. 122, 1921.

Highlands of British East Africa north to Kavirondo, where it meets with *A. a. melanotus*. Type: Fort Hall, Kikuyu Mountains.

Kenia, Fort Hall (Kikuyu), Nairobi, Kisumu; while *unicolor* inhabits the coast regions, *i.e.* Mombasa, Changamwe, Tsavo, Lake Jipe.

803. **Spermospiza ruficapilla** Shell. **Red-headed Forest Weaver.**

A very constant species which ranges from West Uganda east to the Elgeyu Escarpment.

Budongo, Bugoma, Mubango, Lugalambo, Kyetume, West Elgon, in Uganda; East Elgon, Kakamega, Maraquet, in East Africa.

804. **Spermospiza poliogenys** Og.-Grant. **Lesser Red-headed Forest Weaver.**

I know of no records of this bird from Uganda Proper, but have no doubt that it extends to within its boundaries.

805. **Pyrenestes ostrinus centralis** Neum. **Uganda Thick-billed Forest Weaver.**

I find that with additional material I am not able to decide whether this is a good race. I have two males with enormous bills equalling *P. o. ostrinus* in size, the other two being smaller.

Bugoma, Mabira, Lugalambo.

806. **Pyrenestes coccineus** ? subsp. **Thick-billed Brown Forest Weaver.**

A ♂ shot 20.vi. at Mubendi agrees with specimens reported on in *Ibis*, 1916. They differ from typical *P. coccineus* by having the wings much darker olive-brown; more material may show that the Uganda birds are distinct from Sierra Leone ones.

807. **Pseudonigrita cabanisi** Fisch and Rchw. **Black-headed Sociable Weaver.**

? *P. enchora* Oberh.

Birds in fresh, not worn, plumage agree absolutely with the co-type of *P. c. enchora* Oberh., and I doubt if this race is recognisable. I find the undersides of my birds white, without any fleshy-pink tinge which is stated by Oberholser to be a character of *cabanisi*.

M'buyuni and Teita.

808. **Pseudonigrita arnaudi arnaudi** Bp. **Grey-capped Sociable Weaver.**

Pale, like birds from Nimuli.

Kacheliba and Kerio in South Turkana. Plentiful in the desert and dry country.

809. **Pseudonigrita arnaudi kapitensis** Mearns. **Kapiti Grey-capped Sociable Weaver.**

P. a. emini Rchw.

This race is recognisable on account of its larger size (wings, 65–70 mm.) and darker mantle. Four young birds without the grey cap agree well with the description of *P. a. emini*, which must be a synonym. I find two specimens from the Magadi district, collected 20.xi.1917 and 21.xi.1917, indistinguishable from Nimule ones. They are not worn and not bleached by the action of the strong alkali in the lake.

M'buyuni, Simba, Taveta, Magadi, Machakos.

810. **Amadina fasciata alexanderi** Neum. **Cut-throat Finch.**

Comparison with Abyssinian and South Ethiopian birds shows that the East African birds have rather coarser bars on the mantle and underside, and that the mantle is rather browner. The difference is most pronounced in the females. Seven males show an inclination to assume uniform brownish buff backs; this is particularly the case in specimens taken at Lake Magadi. Owing to insufficient Abyssinian material, I refrain from naming these southern birds.

Kisumu, Magadi, Simba, Tsavo, Taveta.

811. **Quelea erythrops** Hartl. **Red-faced Weaver Finch.**

With more material it may be shown that the coastal birds differ from Angolan specimens.

Masindi, Entebbe; also Mumias, Changamwe, and Mombasa. 5 ♂ 4 ♀.

812. **Quelea cardinalis** Hartl. **Red-headed Weaver Finch.**

Birds from Nairobi have very bright red heads and crimson throats, rather more richly coloured than birds from Uganda.

Masindi, Kawala, Jinja; Kimiriri River, Kisumu, and Nairobi.

813. **Quelea sanguinirostris intermedia** Rchw. **Southern Masked Weaver Finch.**

As more than half of a series of sixteen adult breeding males have small black foreheads as distinct from the Abyssinian *Q. s. aethiopica*, and as three have wide black foreheads as in typical *Q. s. sanguinirostris* of Senegal, I prefer to adopt Reichenow's name for the East African birds, and I recognise a dark race inhabiting the central lake district and West Uganda. As is well known, this bird varies in the amount of pink on the breast, crown, and abdomen. These birds on the whole have blacker cheeks and throats than Ethiopian specimens. The pale-headed variety "*russi*," without black on the head, is not common, but I obtained four. I do not consider them to be very old birds, as stated by Butler. I have had a young bird which moulted straight from its nest plumage into the "*russi*" plumage.

Kisumu, Mumias, Nakuru, Naivasha, Nairobi, Simba, Tsavo, Taveta.

814. **Quelea sanguinirostris centralis** van Som. **Ankole Masked Weaver Finch.**

Bull. B.O. Club, xli. p. 122, 1921.

When compared with eastern *aethiopica* and western *sanguinirostris*, it is at once evident that the central lake birds (♀) are darker, more brownish on the head and mantle, and darker below. The males are for the most part coloured as in the Angolan race.

Toro, Albert Edward (type), Bukoba, South Ankole, in Uganda; also Kivu and North Tanganyika.

815. **Anomalospiza imberbis** Cab. **Yellow Swamp Finch.**

A. rendalli.
A. macmillani.
A. butleri.

I collected a series of sixty-two of this hitherto rare bird. I have placed three so-called races of this bird as synonyms. This may at first appear rash, but I have compared the types of all three with my birds, and these names apply to the same birds in different plumages. There is the most extraordinary variation in both males and females between fresh moulted birds, birds that are breeding, and those that have come through the breeding season, the plumages being in males: Fresh moulted—olive-green with greyish tips to the feathers of the upper and underside; breeding—greenish yellow, orange-yellow crown, mantle more distinctly streaked, flank feathers with dark shafts; after breeding—crown yellow, mantle still more distinctly streaked, underside bright yellow.

In females, head greyish brown, mantle greyish brown, both with slight olive tinge, throat buffy white; breast uniform buffy brown, flanks faintly streaked and brownish washed.—Head more distinctly streaked, mantle more streaked, breast distinctly streaked, flanks streaked, abdomen and throat paler.—Altogether paler in colour on the upper and undersurfaces, a totally different-looking bird to fresh moulted ones! The young in nestling plumage are pale golden buff or brown to sandy; heavily streaked on the head, neck, and mantle; golden sandy below, slightly paler on the belly; bill yellowish; culmen darker brownish. Later we find the general tone becoming paler, less golden sandy, and the underside almost white; when the bird starts moulting in its first full dress we find the buff or yellowish feathers coming in on the breast and the head becoming olive-greenish-brown, with greyish-tipped feathers. The time of moulting of the young and adults takes place in June. Full-plumaged fresh birds were captured in June also. Whether or not there is a double moult in the year I am unable to say with certainty, but I am almost certain that this is the case.

As far back as 1912 I found and photographed a young Finch which I took out of a nest of a *Cisticola*. Not knowing the bird, I failed to recognise it until I collected specimens of young birds, as described above, along with adult birds, in 1916. In my notes I find the entry: "July 7th, 1912—photographed a young Finch in nest of *Cisticola ruficapilla fischeri*? Parasitic?" Later, Roberts, of South Africa, proved by a series of photographs that *Anomalospiza* is parasitic in just such a way as *Vidua serena*, but that it victimises the *Cisticolas* and apparently not Finches. The eggs which I take to belong to this bird are uniform pale bluish with a dull surface—not glossed as in *Pyromelana*.

The distribution of this bird is of the greatest interest, for we find it in South Africa (Natal) and Zanzibar, at Lamu in East Africa, inland to Nairobi and thence to Kisumu and into Uganda, going north to the Sudan and Abyssinia, and we meet with it again in Sierra Leone. Much as I dislike the lumping of races under one name, yet in this instance, because I find that birds taken in one locality at the same time show to perfection the characters on which the several races were founded, I have no option in the matter. I have examined over 100 skins.

A. imberbis Cab. was described from Zanzibar, *rendalli* Shell. from Natal, *macmillani* Bannerm. from Abyssinia, *butleri* Scl. and Praed from the Sudan.

All the characters supposed to be peculiar to these forms are found in birds from Nairobi and other districts.

Lamu, Mombasa, Thika, Nairobi, Kisumu, in East Africa; Elgon, Meuressi, Turkwell, and Moroto in Uganda.

816. **Pyromelana flammiceps changamwensis** Mearns. **Coast Red-crowned Bishop.**

This race is distinct from all other East African or Uganda forms and recognisable from the typical *flammiceps* by its larger size and stronger, larger bill. The females are more ochraceous on the breast. Apparently limited to the coastal belt and not penetrating into the highlands.

Changamwe, Mombasa, Malindi, and Samburu.

817. **Pyromelana flammiceps rothschildi** Neum. **Uganda Red-crowned Bishop.**

5 ♂ 1 ♀ agree best with *P. f. rothschildi*, the type and cotypes of which I have examined. The mantles of these birds and mine are dark brown, washed with red, the under tail-coverts are white in four out of the five birds in Tring and three out of the six in my series, so that this character cannot be regarded as of value. It should be remarked that, whereas the buff feathers are fresh, the white ones are old. In the character of the mantle this race is recognisable from *P. f. petiti*, of Sudan. This is a smaller bird than that found at the coast.

The birds recorded by me under *P. flammiceps* (*Ibis*, 1916) should refer to this race.

Nyarondo, Kisumu, in East Africa; Busoga in Uganda.

818. **Pyromelana nigrifrons leuconota** Rchw. **Western Uganda Black-fronted Bishop.**

I find now that the Uganda birds mentioned *Ibis*, 1916, p. 416, are not true *nigrifrons*. They belong to the race which is found along the central lake region, to which Reichenow gave the name *leuconata*, unfortunately using as typical birds specimens with very pale straw-coloured backs. It has been proved beyond doubt that these pale-backed birds are old males that have come through the nesting season and are consequently faded, while fresh-plumaged males have the back reddish brown. The crown and breast-band in this race is a deep red, not orange-red, thus contrasting markedly with the east shore birds.

South Ankole, Kasinga, Lusasa, Kilima, Toro, in Uganda.

819. **Pyromelana marwitzi** Rchw. **Kavirondo Black-faced Bishop.**

I am not certain that this bird is a subspecies of *nigrifrons*. These birds differ from the Western Uganda race in having the red of the head, breast, and rump orange-red, not scarlet-red, and in having the black forehead extensive. Nesting habits are as with all this group. The eggs, two to three, are blue.

The type came from Wemberc, Tanganyika Territory; Kendu Bay, Kisumu, Kano, in East Africa.

820. **Pyromelana nigriventris rufigula** van Som. **Little Red-throated Black-breasted Bishop.**

Bull. B.O. Club, xli. p. 122, 1921.

These birds are from the Teita and Ukamba district. In four males from Bura and Voi and one from Kitui the throat and breast are red, as in *P. franciscana pusilla*, but they have, of course, not got the long upper tail-coverts, and most of the other males show red feathers on the throat and upper breast, while two are almost indistinguishable from typical *nigriventris*.

Type locality, N'ziu River.

Bura, Teita, Voi, and Kitui in Ukamba. 6 ♂ 3 ♀, February and March.

821. **Pyromelana nigriventris nigriventris** Cass.

Coast region from Lamu south to Mombasa. No trace of red on the throat or breast.

Lamu, Manda, Mombasa. 7 ♂ 8 ♀, from April and July, examined.

822. **Pyromelana diadematа** Fisch. and Rchw. **Little Orange-crowned Bishop.**

My single male is in off plumage, but full-plumaged birds were obtained by Percival at Voi. My three March females were shot from a flock which passed overhead, and in which were no full-plumaged males.

Tsavo and Bura.

823. **Pyromelana ansorgei** Hart. **Yellow-mantled Black Bishop.**

Six fine adult males and a ♀ of a somewhat rare species, the distribution of which appears to be limited to Uganda.

Masindi, Bugoma, Sio, in Uganda.

824. **Pyromelana friedrichseni** Fisch. and Rchw. **Large Yellow-backed Black Bishop.**

Probably occurs in the Magadi and South Loita district.

825. **Pyromelana intercedens** Erl.

Has been recorded from Lake Baringo.

826. **Pyromelana xanthomelas** Rüpp.

I cannot find any difference in size or colour between Abyssinian, Uganda, Toro, and East African specimens.

South Ankole, Budu, Toro, Masindi, Jinja, in Uganda; Kimiriri, Elgon, Kisumu, Burnt Forest, Kyambu, Fort Hall, Naivasha, Nairobi, Maungu, Masongoleni, in East Africa.

827. **Pyromelana crassirostris** Og.-Grant. **Thick-billed Yellow-rumped Bishop.**

Ruwenzori.

828. **Urobrachya axillaris media** Sharpe. **Uganda Red-shouldered Whydah.**

This bird has usually been called *phoenicea*, but must now be called *media*, the name *phoenicea* referring to the Nile birds. It is noticeable that females of this bird from Uganda and the central lakes are more rufous than East African specimens.

Masindi, Bugoma, Entebbe, in Uganda; Kisumu, Mumias, and Fort Ternan in East Africa.

829. **Urobrachya axillaris zanzibarica** Shell. **Coast Red-shouldered Whydah.**

U. hildebrandti Sharpe.

U. nigronotata Sharpe.

Easily distinguished from the up-country birds by larger size and heavier build.

Mombasa and Changamwe.

830. **Coliuspasser hartlaubi humeralis** Sharpe. **Elgon Buff-shouldered Giant Whydah.**

This is an excellent race, never getting such a long tail as the Angolan species and always with rather heavier bills and having wings from 100 to 105 mm.

Mumias, Nandi, in East Africa; West Elgon in Uganda.

831. **Coliuspasser hartlaubi hartlaubi** Bocage. **Angolan Buff-shouldered Whydah.**

Has been recorded from Western Uganda, but I have seen no specimens from this district.

832. **Coliuspasser macrurus conradsi** Berger. **Yellow-backed Black Whydah.**

These specimens ought to be, according to locality, referable to this race from Victoria Nyanza (Ukerewe Island), but my birds do not possess long tails—not more than 125 mm.

Mumias in North Kavirondo.

833. **Coliuspasser macrocercus soror** Rchw. **Yellow-shouldered Black Whydah.**

There is as much as 20 mm. difference in the length of the tails of full-plumaged birds. The longest are not limited to any particular locality.

Masindi, Kawala, Bukedi; East Elgon, Mumias, North Kavirondo.

834. **Coliuspasser eques** Hartl. **Brown-shouldered Black Whydah.**

One male is entirely jet black.

Jinja in Uganda; Mumias, Kisumu, Nairobi, and Fort Hall in East Africa.

835. **Penthetria concolor** Cass. **Black Long-tailed Whydah.**

It is of interest to note that all the birds obtained in the Masindi district were jet black. I accept this bird as being distinct from *C. ardens tropicus*, though they may occasionally interbreed.

Masindi and Entebbe.

836. **Penthetria ardens tropicus** Rchw. **Uganda Cut-throat Black Whydah.**

When compared with typical *C. ardens* of South Africa it is quite noticeable that the red throats are darker, more crimson, in the northern birds. I therefore consider it a good race. Birds with yellow or orange bands are varieties.

Jinja and Kampala, Uganda.

837. **Penthetria ardens teitensis** van Som.

Bull. B.O. Club, xli. p. 121, 1921.

Smaller than *P. a. ardens* and *tropicus*, apparently narrower crimson throat-band, much narrower tail-feathers, than Uganda specimens. This character is borne out by specimens in Tring Museum.

East of Kilimanjaro, Bura Hills, Teita (type loc.).

838. **Penthetria laticauda suahelica** van Som. **Red-hooded Long-tailed Whydah.**

Bull. B.O. Club, xli. p. 122, 1921.

When a series of East African specimens is compared with typical birds it is noticeable that the former develop longer tails, but the wing-measurements are considerably less, the East African bird having wings of 70–80 and the Abyssinian one of 81–87 mm., mostly 84–85. As these differences are constant, I propose to recognise this southern race. Type locality, Nairobi.

Kerio, Kirimiri, Elgon, Kisumu, Maraquet, Elgeyu, Burnt Forest, Kikuyu, Nairobi, Ukamba.

839. **Drepanoplectes jacksoni** Sharpe. **Jackson's Dancing Whydah.**

Melanism is frequently exhibited in this species when in captivity, the alteration taking place in two moults.

Nairobi, Kyambu, Naivasha, Nakuru, Elgeyu.

840. **Dioptrornis progne delamerei** Shell. **Delamere's Long-tailed Whydah.**

The sequence of plumages from the first juvenile to the adult is as follows :—

(*a*) Very like the females, but richer sandy buff, with black streaks to the feathers of the upper side and on the breast and flanks; a faint yellowish tinge to the "shoulders"; tail short; bill brown. This plumage is moulted in two to three months.

(*b*) A paler plumage takes its place, more like the female dress, while the tail-feathers become elongated and the central pair pointed; the shoulder-patch is now orange; bill dark brown.

(*c*) The next plumage is a black dress with the tail-feathers black and about 30 mm. long; the shoulder-patch still orange, but outlined on the lower edge with buff-tipped feathers; bill blackish grey.

(*d*) The black plumage is shed and the bird reverts to a dress similar to plumage (*b*), but the shoulder-patch remains deep orange.

(*e*) As the bird becomes mature it again assumes the full black plumage, with a long black tail and the shoulder-patch bright red and sandy buff, the latter quickly fading to a pale buff or creamy colour; the bill is now greyish and the bird ready to breed. Many birds commence breeding before having completed the total moult. The change is brought about by moult, not colour change.

Kenia, Aberdare Mountains, Naivasha, Nakuru.

841. **Steganura paradisea verreauxi** (?). **Northern Shaft-tailed Whydah.**

I am of the opinion that the East African form of *S. paradisea* will have to be recognised under a special name when sufficient typical material is available. The female birds are darker, more brownish on the mantle and below, than Abyssinian specimens. The young in first nestling plumage are considerably darker. Adult males are indistinguishable; the difference is in the adult females and young.

Taveta, Samburu, Kitui, R. N'ziu, Ukamba.

842. **Linura fischeri** Rchw. **Straw-tailed Whydah.**

Birds in Tring from South Ethiopia are hardly as deep glossy black on the mantle, and the straw colour of the crown is paler; but fresh material may show these differences to be due to wear.

Plumages.—(*a*) The young bird in nestling plumage is a dull rusty brown, rather paler on the abdomen; the legs and bill flesh-brown. (*b*) From this plumage the bird moults into a dress similar to that of the adult female, occasionally with short straw-like central tail-feathers, and the bill becomes salmon-red, (*c*) and from this into the full breeding dress.

Taveta, Tsavo, Loita, Simba, Kikuyu, Kitui, and Kendu Bay.

843. **Vidua hypocherina** Verr. **Blue-black Whydah.**

The adult females of this species can always be distinguished from females of *Vidua serena* by the decidedly white inner webs to the primaries, the white area being sharply differentiated from the darker tips. From the female of the genus *Hypochera* they differ in the same way, although females of the "steel" Finches have the inner webs whitish, but not sharply defined. Another good character is the colour of the bill in fresh specimens: in *Vidua hypocherina* the bill is white, in *Vid. serena* brownish red, and in *Hypochera* greyish. The underside of *V. hypocherina* is white with just a tinge of buff on the sides of the breast and a few streaks in this region; in *Vidua serena* buffy brown, abdomen whitish; and in *Hypochera* greyish brown with whiter abdomen.

The young in first plumage is very like young of *Linura fischeri*, but the abdomen is whiter and the bill whitish, not red-brown.

I shot examples of *V. hypocherina*, *V. serena*, *Linura fischeri*, *Steganura p. verreauxi*, and *Hypochera orientalis* all together, at a drinking-hole in the Taru desert. The birds come there in hundreds to drink, about one or two o'clock.

Samburu, Kisumu, Kacheliba.

844. Vidua serena Linn. Common Pied Whydah.

My series indicates quite clearly the sequences of plumages through which this bird passes before and after attaining maturity. Shortly, the plumages are :

(*a*) Nestling and when with foster-parents : dull grey-brown or hair-brown, paler on the underside and buffish on the abdomen ; bill dark brownish, legs brownish. The first change towards plumage (*b*) is in the colour of the bill, which turns from dark brown to red. The head and mantle then become striped with the sprouting of dark centred feathers with reddish brown or sandy edges, and the underside becomes paler. This change is gradual, and when completed, plumage (*c*) is reached, and this is like the adult female in off plumage. This point should be noted. If the young bird is a male, it moults into a plumage (*d*) which is very like that of an adult female, only the underside is *whiter*, head and mantle rather more boldly striped, and the central two pairs of tail-feathers black with sometimes pale edges of similar character to those assumed by the adult male, but they do not project more than about an inch beyond the outer tail-feathers. This plumage exactly resembles the dress of adult males in off plumages ! If the young bird be a female, it retains the plumage described as (*c*), but when it matures or is ready for breeding, a marked change takes place, the plumage assumed being darker, and the bill turns *from coral red* to *dark brown*. After the nesting season, the bill changes back to red. My experience goes to show that this bird is not polygamous. Although parasitic on other Finches, especially *Estrilda*, I have never seen more than one female with a male, when the former are laying. I have seen the female accompanied by the male enter the nest of an *Estrilda*, deposit its egg, and then fly off with the male. Most of the so-called females accompanying the males when these birds " flock " are young males and a few young females.

Mombasa, Changamwe, Samburu, Lake Jipe, Tsavo, Simba, Athi, Nairobi, Fort Hall, Naivasha, Nakuru, Kisumu, Elgeyu, in East Africa ; Jinja, Entebbe, Elgon, Moroto, Kiniriri, Bugoma, and Masindi in Uganda.

845. Odontospiza caniceps Rchw. White-rumped Silver-billed Finch.

Some birds are pale-breasted, and some dark-coloured, but the differences are not limited to definite ranges. Uganda and East African specimens are equal in size.

Meuressi, Turkwell, Kerio, Kacheliba, in Uganda ; Kisumu, Simba, and Tsavo in East Africa.

846. Aidemosyne cantans meridionalis Mearns. Abyssinian Scaly-headed Silver-billed Finch.

I have checked over Mearns's division of this group, and while agreeing that the South Abyssinian, Rudolf, and Somali birds are different from the South Arabian,

and typical birds from Senegal, I cannot unite with any of them the birds from the South Ukamba and East Kilimanjaro district. The South Abyssinian bird, which extends to south Lake Rudolf, is pale, but distinctly barred, and has the spotting of the throat indistinct.

Meuressi, Turkwell, Kobua, Lake Rudolf.

847. **Aidemosyne cantans tavetensis** van Som. **Southern Scaly-headed Silver-billed Finch.**

Bull. B.O. Club, xli. p. 121, 1921.

These birds are more distinct from the Senegal bird than *A. meridionalis*. Upper surface considerably darker with a greyish tinge, the scales on the head more pronounced, and the spotting on the chin larger and more distinct, underside white.

South Ukambani to Kilimanjaro: Simba (type), Tsavo, M'buyuni, Taveta. Fourteen specimens.

848. **Amauresthes fringilloides** Lafr. **Pied Manakin.**

Has been taken at the coast of Vanga district and Zanzibar.

849. **Pseudospermestes microrhynchus** Rchw. **Large Black-headed Manakin.**

The type locality is Buddu in Uganda. I have no specimens.

850. **Spermestes cucullatus** Swains. **Green-headed Manakin.**

Very plentiful. Some have greenish heads, others purplish.

Masindi, Bugoma, Sezibwa, Kawala, Meuressi, Uganda; Elgon, Maraquet, Kisumu, Kendu Bay, Nairobi, Taveta, East Africa.

851. **Spermestes scutatus** Heugl. **Abyssinian Green-headed Manakin.**

These birds have no trace of greenish or purplish on the flank feathers and must therefore belong to this form, if it is a species!?

Nairobi and Elgon.

852. **Spermestes nigriceps** Cass. **Brown-backed Manakin.**

I think that this form and the next should be considered races of one species, most *S. stigmatophorus* showing a strong brownish tinge on the mantle.

Nairobi and Taveta.

853. **Spermestes stigmatophorus** Rchw. **Black-backed Manakin.**

I consider this to be a subspecies of the West African *S. poensis*. The forms do not overlap and are geographical representatives.

Masindi, Bugoma, Sezibwa, Mabira, and Elgon in Uganda; North Kavirondo in East Africa.

In the North Kavirondo district, Elgon, Moroto, Turkana, we find a bird which is nearest to *B. atricollis ansorgei* Grant, from Portuguese Guinea.

854. **Ortygospiza atricollis ugandae** van Som. **Uganda Partridge Finch.**

Bull. B.O. Club, xli. p. 121, 1921.

These two birds and one from Entebbe, collected by Grauer (Tring Museum), have uniform grey-brown mantles, black foreheads, extensive black throats, and small white chin-spots, with a white ring round eyes ; breasts pale brownish. The female, however, has a white chin-spot. They thus differ from birds from Sierra Leone, which agree with *O. a. ansorgei* (*vide* Nov. Zool. xxii. p. 264, 1915). The Butiti specimen mentioned by Dr. Hartert is referred to under the next race. Type in my own collection, but will be incorporated in the Tring Museum.

Mumias, North Kavirondo.

855. **Ortygospiza atricollis dorsostriata** van Som. **Ankole Partridge Finch.**

Bull. B.O. Club, xli. p. 115, 1921.

The nearest to this form is *gabonensis* of Lynes, but the Uganda birds are richer rufous below and the flanks are darker. The female has no white chin-spot. The male has a small indication of white on the chin, but no white round the eye.

Western Uganda.

Butiti, Toro, and Kigezi, South Ankole, South-western Uganda.

856. **Ortygospiza atricollis mülleri** Zedl. **White-chinned Partridge Finch.**

Very near *polyzonus* of South Africa, but darker above and more distinctly barred below. With this race Zedlitz united the birds from South Abyssinia, Gallaland. I find that the series of birds from South-east Ethiopia in Tring Museum collected by Zaphiro are paler, more greyish above, and probably ought not to be united.

O. a. mülleri is the common form in East Africa, ranging from the southern scrub belt north to the South Kavirondo plain and Sotik-Mau Escarpment. They do not have a black chin and black throat, but have these white, and a large white ring round the eye. They have almost uniform backs, the mottlings being indistinct.

Nairobi, Machakos, Nakuru, and South Kavirondo.

857. **Cryptospiza salvadorii** Rchw. **Salvadori's Crimson-backed Forest Finch.**

I have no specimens from the typical locality for comparison, but as that is Shoa, it is quite possible that my birds are not typical.

Mt. Elgon, North Kavirondo, Elgeyu, Maraquet, Molo, Kikuyu, Nairobi, Kenia.

858. **Cryptospiza** spec. ?

1 ♂, 21.vii.1916, differs from the rest of the East African birds in having the lower surface pinkish buff, the flanks tinged with olive. Crown olive-brown. Cheeks greyish, not washed with olive-green.

Eastern slopes of Mt. Elgon.

859. **Cryptospiza borealis** Percival. **Percival's Red-backed Forest Finch.**

Bull. B.O. Club, 1912.

I have compared four males from October and also the types and topo-types with *C. salvadorii*, and they must certainly be kept separate, *borealis* being much less bright crimson on the mantle and rump. The colour of the back is more brownish olive-green.

The range of this bird appears to be limited to Mt. Uraguess on the Northern Guasso N'yiro.

860. **Cryptospiza jacksoni** Sharpe. **Jackson's Forest Finch.**

This species is not common in South Ankole, but more plentiful in the forests of the Kivu district.

Lukiga Kagezi, South Ankole. 2 ♂ 1 ♀.

861. **Cryptospiza shelleyi** Sharpe. **Shelley's Forest Finch.**

Forests of Ruwenzori and Kivu.

862. **Cryptospiza reichenowi** Hartl. **Reichenow's Forest Finch.**

Ruwenzori. It is not represented in my collection.

863. **Cryptospiza ocularis** Sharpe. **Red-eyed Forest Finch.**

No specimens are available for comparison.

864. **Nesocharis capistrata?** **Golden-flanked Forest Finch.**

4 ♂ 1 ♀ do not agree with the description of typical *capistrata* from "Gambia" and may belong to a recognisable race, but material for comparison is not available.

Masindi.

865. **Nesocharis ansorgei** Hart. **Ansorge's Black-headed Forest Finch.**

The type came from Toro, and the species has since been obtained on Ruwenzori and in the Albert Edward district.

866. **Linurgus elgonensis** van Som. **Black-headed Oriole Finch.**

Nov. Zool. April 1918.

Besides my 4 ♂ and 2 ♀ there are now in Tring four others collected near Elgon by Mr. Turner for Colonel Meinertzhagen. This bird is somewhat like *L. olivaceus*, but is altogether brighter, and has no rufous band separating the black neck from the golden yellow of the breast. The type is in the Tring Museum. Females of this species are brighter than female *olivaceus*. It is quite distinct from *L. kilimensis*, which is a dark olive-green bird with little or no yellow.

Elgon and Kakamegoes.

867. **Nigrita schistacea** Sharpe. **Black-breasted Forest Finch.**

N. sparsimguttata Rchw.

The type locality of this bird is the Sotik Forest, in East Africa, and of *sparsimguttata* Bukoba, west of Victoria Nyanza. I have compared typical specimens and find no difference. The name *schistacea* is the older name and must stand. I wish to draw particular attention to the distribution, and would request a comparison with the distribution of the next species.

Masindi, Bugoma, Budongo, Kagera, Entebbe, Sezibwa, Lugalambo, Elgon, Elgeyu.

868. **Nigrita diabolica** Rchw. **Kilimanjaro Black-breasted Forest Finch.**

N. dohertyi Hart.

I am not satisfied that the East African birds are really distinct from Uganda specimens. Some specimens from Nairobi, Kenia, and Naivasha are darker than Uganda birds, but others not. As no Kilimanjaro birds are available for comparison, I cannot say whether these specimens are actually the same as *N. diabolica*, the type of which came from Kilimanjaro. Birds from Escarpment in the Tring Museum are placed as *N. diabolica*, of which *dohertyi* Hart. is a synonym.

Molo, Naivasha, Nairobi, Kenia.

(It would appear that we have one race ranging through the great Mau Forest up to Elgon and through Uganda, and another from Kilimanjaro north through the Kikuyu and Aberdare Mountains to Kenia, with the Rift Valley in between.)

869. **Nigrita fusconota** Fras. **Little Black-capped Forest Finch.**

I can find no difference between Uganda and typical West African specimens.

Entebbe, Sezibwa, in Uganda; East Elgon and North Kavirondo in East Africa.

870. **Hypochera funerea** Tarrag. **Purple Black Finch.**

? *H. purpurascens* Rchw.

The identification of these birds must remain somewhat doubtful until the type or topo-types of *H. purpurascens* are compared. The specimens agree well with *H. funerea* in the Tring Museum. They are without sheen. This type of bird is found east of Kilimanjaro.

Morogoro, Tanganyika Territory. (Loveridge leg.)

871. **Hypochera** (near **chalybeata**). **Green Black Finch.**

1 ♂, Kisumu, 7.vi.1912, belongs to the "*chalybeata*" group, having a distinct green sheen, not bluish. A similar type of bird is found near Milanje, in Nyassaland.

872. **Hypochera** sp. **Dull Blue-black Finch.**

2 ♂, 17.ii.1917, 26.viii.1918, are very dull blue-black, with the crown almost dead black. They are adults in good condition. They do not agree with any of the described races known to me.

Kisumu and Kendu Bay.

873. **Hypochera ultramarina** Gm. **Glossy Dark Blue-black Finch.**

Four males agree perfectly with specimens from Abyssinia.
Buvuma Island and Kacheliba.

874. **Hypochera orientalis** Rchw. **East African Blue-black Finch.**

? *H. amaumopteryx* Sharpe.

These birds are a bright blue-black, and agree with typical *H. orientalis*. The change which the males undergo, from blue-black to a grey-brown plumage, is well known, but it is worthy of recording that when the females come into breeding condition, they become very much darker on the crown, mantle, and breast than in the off season, the breasts in some breeding birds being a deep ashy brown. The plumage is very like that of the non-breeding male, but even darker. The character of white under tail-coverts mentioned in connection with these birds is not reliable, and simply indicates remains of the off-plumage dress, these feathers being almost the last to be moulted. With regard to the brownish wings in certain birds of this group, it is quite noticeable that males which have gone through the nesting season, although showing very little abrasion of the tips of the primaries and secondaries, yet have these feathers much browner than in the freshly moulted, adult, breeding bird. The first young plumage is like that of the female in off-plumage, but altogether duller and paler on the breast.

Nairobi, Simba, Kikuyu, Voi. Not rare.

875. **Coccopygia dufresnayi kilimensis** Sharpe. **Little Grey-headed Grass Finch.**

Nairobi, Kyambu, Kenia, Elgeyu, Londiani, Elgon.

876. **Coccopygia dufresnayi nyansae** Neum. **Uganda Little Grey-headed Grass Finch.**

C. d. minima Og.-Grant.
Hardly separable from the preceding race.
Bugoma and Budongo Forests in Uganda.

877. **Granatina ianthogaster ianthogaster** Rchw. **Brown-backed Chestnut and Blue Waxbill.**

The characters of this race are :—Male : bright chestnut head, not strongly contrasting with the brownish earth-brown mantle ; in some cases mantle decidedly chestnut-brown, thus very like *G. i. hawkeri*. Chin and throat bright chestnut, upper breast with blue band followed by a more or less complete band of bright chestnut ; abdomen blue on a brown base. Blue ring round eye, not very large. Wings, 57 mm.

Female : Very like the male on the upper side, but slightly duller ; the ring round the eye, which is well marked, is pale lilac. Underside darker than in *G. i. hawkeri*.

Young : Head and breast brownish ; mantle slightly duller ; underside, abdomen, and flanks and under tail-coverts whitish.

South Tana through the plains to Kilimanjaro : Tana River, N'ziu River, Ukamba, Kitui, Simba, Tsavo, Voi, Maungu, Masongoleni, Bura, M'buyuni, Taveta.

(**Granatina i. hawkeri** Phillips. **N. Somali Chestnut and Blue Waxbill.**

This race does not occur within the limits of East Africa. It is brighter chestnut on the head and mantle, the back being the same colour as the crown. Eye-ring small. Wings, 54 mm., *i.e.* smaller than typical race. Female very like the female of *G. i. ianthogaster* but smaller and with a slight indication of a white or very pale lilac eye-ring. The young has a brownish head, back, and breast, with the centre of abdomen paler; mantle tinged grey.)

877a. **Granatina ianthogaster ugandae** van Som. **Turkana Chestnut and Blue Waxbill.**

Bull. B.O. Club, December 1919.

Very like *G. ianthogaster*, but head not so bright rufous; mantle more hair-brown; blue on the underside limited to a circumscribed patch on the breast and abdomen. The female differs from the typical bird in having the head paler, mantle and breast paler, eye-ring smaller, as in *G. i. hawkeri*, the abdomen whitish. Wings in males, 57 mm.

The young bird differs from the young of *G. i. ianthogaster* in being much paler and in having the whole of the abdomen whitish.

South Ethiopia to Lake Rudolf and Turkana: Mt. Moroto, Kerio, Kobua, in Turkana.

878. **Granatina ianthogaster roosevelti** Mearns. **Loita Chestnut and Blue Waxbill.**

Very much like typical *G. i. ianthogaster* but larger. Wings, 60 mm.; mantle darker, more earth-brown; head light chestnut, blue on the breast not in any regular pattern but unevenly distributed on a brown ground; chin blue. The female is distinguished from *G. i. ianthogaster* much as the males differ, and has the eye-ring lilac-blue or bluish; abdomen greyish, not whitish buff.

Loita Plains from Sotik to N'guruman and southern Guasso N'yiro: Loita, Narok, Sotik.

879. **Granatina ianthogaster montana** van Som. **Naivasha Chestnut and Blue Waxbill.**

Bull. B.O. Club, xl. p. 53, 1919.

Males very much like *G. i. roosevelti*, but darker on the mantle and more blue on the underside; wings longer, 60–64 mm. The females differ from those of *roosevelti* by having the eye-ring lilac as in *G. i. ianthogaster*, and in being more earth-brown on the mantle, besides being larger and the flanks shot with bluish. The young is paler than all the other races, being sandy grey, and larger.

Highlands of Kenia Colony 6,500–9,000 feet to Mt. Kenia: Naivasha, Nakuru, Mau, Kenia; also Escarpment. Doherty coll.

880. **Granatina ianthogaster rothschildi** van Someren. **Kavirondo Chestnut and Blue Waxbill.**

Bull. B.O. Club, xl. p. 53, 1919.

These are the most intensely coloured of the group. The adult male differs from that of *G. i. roosevelti* in being larger, in having the whole of the underside

deeper blue, even to having the throat flecked with deep blue and the mantle darker earth-brown. The eye-ring is deeper blue and larger. The female differs from that of *roosevelti* in much the same way, being darker on the mantle, richer, deeper chestnut below, abdomen and flanks shot with purple blue, the eye-ring large and deep blue as in the male. Wings, 58–63 mm. The young are larger and richer brown than those of any other form.

North Kavirondo from Yala to South Kavirondo: Kisumu, Kendu Bay, Kaimosi, Yala, Kibigori, Kano.

881. **Granatina ianthogaster** ? subsp. nov.

1 ♂, 7.xi.1918, is very much like the typical *G. i. ianthogaster*, especially the females, the eye-ring being pale lilac, but they have duller rufous heads and earth-brown, more greyish, not so rufous backs. They thus agree fairly well with the highland race, but the males are much less blue on the underside. Wing, 63 mm.

Dodoma and Morogoro in Central Tanganyika Territory.

882. **Uraeginthus bengalus ugandae** Zedl. **Uganda Red-cheeked Blue Waxbill.**

This is a good race, the range of which appears to be Uganda generally, east to North and South Kavirondo. It is rather noticeable, however, that South Elgon birds are rather greyer on the back than Entebbe ones. The young of both sexes have blue throats, like the adult female. (Cf. next race.)

Nile Province, Entebbe, Jinja, in Uganda; Kisumu, Kendu Bay, Kaimosi, Kibos, and Kibigori in East Africa.

883. **Uraeginthus bengalus brunneigularus** Mearns. **East African Red-cheeked Blue Waxbill.**

Type locality, Wambugu's, near Kenia.

Dr. Hartert, Nov. Zool. 1 99, p. 141, rather suggests that this may not be a good race, but my material shows, in my opinion, that it is excellent. It must be noted, however, that these birds do not occur in Kavirondo, nor yet at the coast. The females have brown throats with just a tinge of blue on the chin; but the best character is the brown cheeks, which never get blue as in *U. b. ugandae* Zedl. It is noticeable that young males have blue throats, while in young females they are brownish.

Adult males of this race and *ugandae* appear indistinguishable!

Nairobi, Kenia, Fort Hall, Kikuyu, Simba.

884. **Uraeginthus bengalus schoanus** Neum. **Ethiopian Red-cheeked Waxbill.**

Three specimens differ from *U. b. ugandae* by being paler below and of a different shade of grey-brown, and agree well with the specimens of *U. schoanus* in Tring.

Meuressi, Turkwell and Kobua, near Lake Rudolf.

885. **Uraeginthus bengalus littoralis** subsp. nov. **Coast Red-cheeked Waxbill.**

Paler on the mantle than *brunneigularis* in both sexes. Males paler blue below, the red ear-patch more restricted in size. Females with cheeks and throats washed

with blue as in *U. b. ugandae*; slightly smaller. Besides these differences the call-note of these birds is not the same as that of the up-country race. They make use of deserted Weaver birds' nests for sleeping and nesting.

Coast of South Somaliland to Mombasa: Lamu, M'koi, Mombasa (type).

886. **Uraeginthus cyanocephalus** Rchw. **Blue-headed Blue Waxbill.**

I have ten beautiful examples of this exquisite little Waxbill. It is apparently confined to the drier desert parts of East Africa, and birds of South Ethiopia appear not to differ.

Tsavo, M'buyuni, Maungu.

887. **Uraeginthus niassensis** Rchw. **Lake Nyassa Blue Waxbill.**

Appears to be fairly plentiful in the Tanganyika Territory and North Mozambique and comes within the Kenya Colony in the Kilimanjaro region, where I procured specimens at Lake Jipe.

Lake Jipe, Morogoro, Kisaki, and Lumbo in Portuguese East Africa.

888. **Pytelia melba mosambica** van Som. **Mozambique Fire-throated Finch.**

Bull. B.O. Club. xl. p. 55, 1919.

Differs from *P. m. melba* and *P. m. elegans* in lacking the yellow-green breast-band, or having it only very slightly indicated, and in having the spotting on the underside large and commencing high up on the breast, in immediate contact with the red throat, also in having the lower breast and sides of abdomen very heavily barred and spotted, so that the underside appears dark. The red on the forehead is very limited. The females are very dark breasted and have grey throats, thus differing from *P. kirki*, in which the female has a whitish throat. Wings, 57–58 mm. Type in Tring Museum.

North Mozambique (Lumbo) to South Tanganyika Territory.

889. **Pytelia percivali** van Som. **Loita Fire-throated Finch.**

Bull. B.O. Club, xl. p. 56, 1919.

The ♀ differs from all known females by having the head and breast dark grey, the spotting of the underside not commencing before the lower breast, and by being larger. Wings, 58 mm. The males are like *P. kirki*, but have the lores white. Wings, 58–60 mm.

Loita Plains (Percival coll.), Simba, Magadi.

890. **Pytelia kirki** Shell. **East African Fire-throated Finch.**

Seven skins from Lamu are very uniform, having the red of the throats limited, and wide golden-green breast-bands. The birds from the dry Tana country, however, are very variable, most having the red of the throat extending well on to the breast-band, and in some cases right on to the breast. The females all possess white throats, thus differing from the birds of the Tanganyika Territory and those from Lumbo, also from the birds from Loita. Wings, 55–58 mm.

Lamu, Changamwe, Samburu, Maungu, Masongoleni, Tsavo, Campi-ya-bini.

891. **Pytelia soudanensis** Sharpe. **Large Pale Fire-throated Finch.**

These large pale birds are easily recognised from *P. kirki* on account of their paler markings and larger size, the males having longer bills. The females differ from female *kirki* in having the throat pale greyish like the breast. Wings: ♂ 58–62, ♀ 58–61 mm.

Mt. Moroto, Meuressi, Kobua, in Uganda; Kacheliba, Kerio River, Lorian Swamp, in East Africa.

892. **Pytelia belli** Og.-Grant. **Bell's Fire-throated Finch.**

These birds have darker grey heads and darker undersides than *P. kirki*.

Toro.

893. **Pytelia phoenicoptera emini** Hart. **Barred Fire-throated Finch.**

Nile Province of Uganda.

894. **Pytelia afra griseigularis** Neum. **Coast Grey-throated Phoenix Finch.**

This is a good race of *P. afra*. Wings, 55–60 mm.

Mombasa, Samburu, Voi.

895. **Pytelia afra** ? subsp. nov. **Kikuyu Grey-throated Phoenix Finch.**

Two males and others in Tring do not agree with the coastal birds, being larger, more greenish yellow on the breast, and greener on the back. They probably belong to an up-country race, but more material is necessary.

Kikuyu, Kenia.

896. **Hypargus nitidula schlegeli** Sharpe. **Red-faced Green-speckled Finch.**

This western form ranges into Uganda and is frequently taken in the forests.

Bugoma and Mubango.

897. **Hypargus nitidula nitidula** Hartl. **Coastal Red-faced Green-speckled Finch.**

? *H. n. chubbi* Og.-Grant.

Has been taken at Mombasa by A. Blayney Percival. Apparently rare. (*Vide* Bannerman, *Ibis*, 1911.)

898. **Hypargus monteiri ugandensis** van Som. **Chestnut-breasted Speckled Finch.**

Bull. B.O. Club, xli. p. 115, 1921.

Differs from the typical Angolan form by having the back darker, so that the nape is not so sharply differentiated from the mantle. Bill slightly larger.

Masindi, Mubango, Kyetume, Buzileranjovu, in Uganda; Entebbe (Grauer), Lado, and Langomeri (Emin Pasha). 6 ♂ 2 ♀.

899. **Hypargus niveoguttatus** Peters. **Crimson-fronted Speckled Finch.**

? *H. macrospilotus* Mearns.

These birds possess all the characters given by Mearns for the Kenia race.

It is possible, however, that my specimens are not typical, as the type came from Inhambane. If different, they would have to bear Mearns's name *macrospilotus*.

Changamwe, Taveta, Sagala, Teita, Kibwezi.

900. **Lagonosticta oenochroa** Hartl. **Black-bellied Crimson Finch.**

? *L. melanogaster*.

This is a very rare bird and is known from very few specimens. Seth-Smith collected a female at Masindi.

901. **Lagonosticta rhodopareia rhodopareia** Heugl. **Red-faced Black-vented Crimson Finch.**

♂♀, 7.xii.1917. This pair undoubtedly belong to the northern typical race. The male is brighter crimson than *L. r. congica*, and the female has a red face which the female of *congica* lacks ; besides, the undersurface is more washed with crimson.

Mt. Moroto, Turkana, east Lake Rudolf.

902. **Lagonosticta rhodopareia congica** Sharpe. **Uganda Black-vented Crimson Finch.**

This race is very like typical *L. rhodopareia*, but the crown is not washed with red, though bright crimson bird. The females lack the red loral spot and chin, and are paler below, more pinkish.

Masindi, Bugoma, Mubendi, Sezibwa, Kyetume, and South Ankole in Uganda.

903. **Lagonosticta rhodopareia hildebrandti** Neum. **Greyish-crowned Black-vented Crimson Finch.**

These birds, although described as a subspecies of *L. rubricata*, should no doubt be placed as I have put them. This race and *congica* do not overlap in their distribution. The bluish-grey wash to the crown distinguishes this race from *L. congica*. The females are alike, except that female *hildebrandti* has a greyish bloom on the head and mantle, which is absent in the northern representative. Young birds are altogether dark brown, except for a slight crimson wash on the upper tail-coverts.

Kyambu, Nairobi, N'gong, Naivasha, Kitui.

904. **Lagonosticta rhodopareia umbriventer** van Som. **Kenia Brown-bellied Crimson Finch.**

Bull. B.O. Club, xl. p. 54, 1919.

Somewhat like *L. r. hildebrandti*, but abdomen and vent cinnamon-brown, under tail-coverts black. The females resemble those of *L. rhodopareia*, but have brownish abdomen. The bill is bluish, as in *L. rhodopareia*.

Embu, East Kenia, and Mount Uraguess.

905. **Lagonosticta jamesoni taruensis** van Som. **Little Black-vented Crimson Finch.**

Bull. B.O. Club, xl. p. 54, 1919.

Altogether brighter reddish than *L. j. jamesoni*, having the mantle distinctly washed with reddish, as in *senegalla*. Vent and under tail-coverts black; the bill bluish black.

Coast from Lamu to Mombasa, inland to the Taru and South Ukamba: Tsavo, Kitui, Mombasa, Teita.

906. **Lagonosticta senegalla ruberrima** Rchw. **Uganda Crimson Finch.**

This is quite a good race and distinct from the East African bird, because the females do not agree. I can find no difference in the males. I have compared a very large series and find the differences constant in the females, and therefore named the Eastern African form. In the Uganda bird the females are darker, more brownish, while the East African birds are paler, more greyish.

Chagwe, Entebbe, Jinja.

907. **Lagonosticta senegalla somaliensis** Salvad. **Lorian Crimson Finch.**

Specimens collected by Blayney Percival agree fairly well with typical *L. s. somaliensis*, but the males are brighter and the female washed with pink on the breast and has a distinct red loral spot.

Juba River.

908. **Lagonosticta senegalla kikuyuensis** van Som. **East African Crimson Finch.**

Bull. B.O. Club, xl. p. 55, 1919.

I have no hesitation in separating the East African race. The females are distinct, as indicated under *L. s. ruberrima*.

Kisumu, Nakuru, Naivasha, Kikuyu, Tsavo.

909. **Estrilda nonnula** Hartl. **Black-capped Grass Finch.**

My series is very uniform and agrees well with typical birds. A series from South Elgon are rather whiter below, not tinged with creamy, and have the breast and flanks more washed with greyish. More material is required from this locality. Kigezi, South Ankole, Masindi, Sezibwa, and West Elgon.

910. **Estrilda atricapilla keniensis** Mearns. **Kenia Black-capped Grass Finch.**

This race is barely separable from *E. a. graueri* from Kivu, of which I have compared the type and cotypes. The Kenia birds do not differ in the way Mearns states, the only character, and this not mentioned by Mearns, being the deeper black of the abdomen and vent; otherwise the birds agree absolutely.

Aberdare Mountains and Kenia.

911. **Estrilda erythronota delamerei** Sharpe. **Delamere's Black-faced Grass Finch.**

These birds are very much darker than southern ones, and possess the characters claimed in the original description.

Loita, Kisumu, and Kendu Bay.

912. **Estrilda charmosyna** Rchw. **Pink-bellied Black-faced Grass Finch.**

? *E. nigrimentum* Salvad.

It is doubtful whether these birds should be united, as has been done by Shelley. Owing to lack of material I am unable to form any definite opinion on the matter. The bird from Turkwell agrees very well with specimens from Somaliland, while the Kacheliba one is not so pink and agrees best with birds from South Ethiopia.

Meuressi, Turkwell, Kacheliba, Uganda.

913. **Estrilda charmosyna pallidior** Jacks. **Pale-bellied Black-faced Grass Finch.**

North Guasso N'yiro. (A. B. Percival leg.)

914. **Estrilda charmosyna kiwanukae** van Som. **Kilimanjaro Black-faced Grass Finch.**

Bull. B.O. Club, xl. p. 55, 1919.

My series is constant in displaying the characters which separate this form from the other races. They are: the clearer bars on the wings and the deep greyish tinge to the underside, giving the lower surface a dull grey-pink colour.

Taveta, Tsavo, M'buyuni, Simba, and Magadi.

915. **Estrilda paludicola** Heugl. **Grey-capped Pale Grass Finch.**

Some males have a deep ochre stripe down the belly, ending in a deep pink vent.

Sezibwa, Bugoma, Mambigirwa, Jinja.

916. **Estrilda roseicrissa** Rchw. **Brown-capped Pale Grass Finch.**

This is a good form.

M'barara.

917. **Estrilda rhodopyga centralis** Kothe. **Uganda Buff Grass Finch.**

E. r. hypochroa Mearns.

E. r. polia Mearns.

I have had a series of over sixty skins for comparison. I regret that I cannot recognise more than one race for Uganda, South Ethiopia, Somaliland, and East Africa. I can pick out birds which agree with the characters of the various races claimed, but such are not limited to specimens from the distribution of these supposed forms, and similar birds are to be found from all the localities mentioned. I agree that Uganda and East African birds are not typical *rhodopyga* and thus, as there is only one race recognisable, the first name applied must stand, and this is *centralis* of Konrad Kothe—*founded on one specimen!*

I would call attention of ornithologists to the variation which one must expect in these birds. Young birds in the first plumage after the nestling dress are very much less or not at all barred. Strong, full-plumaged adults are most distinctly barred and rather dark below.

Ankole, Meuressi, Turkwell, South Rudolf, in Uganda; Kisumu, Nairobi, Simba, Tsavo, Northern Guasso N'yiro, Changamwe, in East Africa.

918. **Estrilda subflava subflava** Vieill. **Little Orange-breasted Grass Finch.**

Uganda specimens are rich red-orange below, and agree well with birds from the type locality. They differ from the East African ones, which again differ from *E. s. clarkei* of South Africa and Angola.

Kigezi, South Ankole, Masindi, Mubendi, in Uganda.

919. **Estrilda subflava** Vieill. (? subsp.). **Yellow-breasted Grass Finch.**

2 ♂,1 ♀, 1 juv., are near *Est. s. clarkei*, but do not agree with typical specimens; they are more richly coloured, but not so rich as the typical *E. subflava*. I have examined a dozen specimens from East Africa, but require more material before coming to a final decision.

Nairobi and N'gong.

920. **Estrilda astrild nyansae** Neum. **Uganda Red-eyebrowed Grass Finch.**

This race is recognisable, being on the whole less heavily or distinctly striped on the breast than East African birds, and having the pink blush carried right up to the throat in full plumage.

Kigezi, Ankole, Entebbe, and Masindi in Uganda.

921. **Estrilda astrild massaica** Neum. **East African Red-eyebrowed Grass Finch.**

In this race the adults are heavily barred right up to the sides of the head and the pink wash is not so extensive as in the Uganda form.

Kisumu, Naivasha, Nakuru, Nairobi, Bura, Samburu.

922. **Sorella emini** Hartl. **Chestnut Sparrow.**

Young birds are like the females, but lack all tinge of brown on the back and underside. Bill yellowish horn. No throat-patch.

Kendu Bay, Kisumu, Maragoli.

923. **Sorella emini** subsp. ?

Two males and one female from North-west Kenia are paler chestnut, lacking the deep tinge on the crown. The female differs in having a paler brown throat and having the mantle and flanks washed with pale rufous. As the locality is rather remote, these differences rather suggest the possibility of a separable form.

924. **Passer rufocinctus** Rchw. **East African Red-rumped Sparrow.**

Nairobi, Naivasha, and Nakuru. Quite typical.

925. **Passer shelleyi** Sharpe. **Uganda Red-rumped Sparrow.**

(*P. cordofanicus* of Selater & Praed, *Ibis*, 1918.)

This is an excellent species, and has nothing to do with *P. cordofanicus*, which is very much like *motitensis* of South Africa. *P. shelleyi* is very much like *jagoensis* of the Cape Verde Islands. The birds referred to *cordofanicus* by Selater & Praed come from the type locality of *shelleyi* and must be of this species, therefore their remarks regarding relationship to *jagoensis*. It is a rare species, and the localities from which I have received it extend its range southward.

North Kerio River and Mt. Kamalinga, Karamoja, in Uganda.

926. **Passer griseus suahelicus** Neum. **Coastal Pale-bellied Sparrow.**

This race and *ugandae* no doubt meet in the Kisumu or Kavirondo district, undoubted hybrids occurring there.

This race has a paler shoulder-patch and mantle than the Uganda form.

Taveta, Simba, and Karungu.

927. **Passer griseus mosambicus** Som.

Darker than *P. griseus suahelicus* and *ugandae*, greyer on the breast and flanks, and the light throat-patch more greyish. The mantle, rump, and shoulder-patch darker. Wings, 75–83 mm.

North Mozambique and East Nyassaland. Type, Lumbo. Six specimens examined.

928. **Passer griseus ugandae** Rchw. **Uganda Grey Sparrow.**

Nestlings have the head, neck, and mantle brownish and are buffy grey below, rather paler on the abdomen; bill and legs brownish. These birds are very little different from *P. griseus swainsoni*. This brings me to the question, which bird is *swainsoni*—the dark- or the light-breasted one? Both occur in North Abyssinia. Opinions differ, but we must go by the type and cotypes, and these Prof. Neumann has examined and has compared with the birds collected by Witherby, Rothschild, and Wollaston in the Sudan. All are pale-breasted birds. We have no right to over-rule this, unless we also examine the types and come to a different conclusion. Having fixed the name *swainsoni*, Neumann found the dark grey-breasted bird without a name and called it *abyssinicus*. The plate of *P. swainsoni* might stand for either the dark or light bird. Zedlitz's view as expressed when he re-named the pale bird *erithrea* cannot be accepted, nor have Selater and Praed (*Ibis*, 1919) sufficient grounds for rejecting Neumann's decision. This takes us a step further, because we get a connecting link between *P. g. abyssinicus* and *P. g. gongonensis* of Oustalet. Both birds are alike in colour but differ in size, and an intermediate form exists, and *P. gongonensis* being the older name we must make *P. abyssinicus* a subspecies of the latter.

Kigezi, South Ankole, Budu, Mawakata, Masindi, Bugoma, Entebbe, Jinja, in Uganda; and Kisumu in East Africa.

929. **Passer griseus gongonensis** Oust. **Mombasa Thick-billed Sparrow.**

The typical heavy-billed birds appear to range inland to about 3,500—4,000 feet, when they begin to get rather smaller (*vide* table of measurements), and this smaller race ranges into Uganda and Rudolf, probably meeting with *P. abyssinicus* in South Ethiopia.

Mombasa, Lamu, Samburu, Campi-ya-bibi, Voi, Kitui, N'ziu.

Wings: ♂ 95, 95, 96, 97, 98, 98, 99, 100, 102; ♀ 91, 92, 95, 96 mm.

930. **Intermediate race** between **P. g. gongonensis** and **abyssinicus.**

Inhabiting the country between Ukamba and Lake Rudolf, characterised by their smaller size and smaller bills—as a rule.

The series in Tring from Escarpment corroborates this.

Moroto, Kerio, in Uganda; North Guasso N'yiro, Kisumu, Nairobi, Kikuyu, Simba, in East Africa.

Wings: ♂ 90, 92, 93, 93, 93, 95, 95, 95; ♀ 85, 85, 85, 85, 90 mm.

931. **Petronia pyrgita massaica** Neum. **Massai Yellow-throated Sparrow.**

This is a good race, not because they have larger bills as mentioned by Neumann, but on account of its much darker upper surface. I find that birds from Uganda south to the coast do not differ. Young birds are browner above and lack the yellow on the white throat.

Kamalinga, Moroto, Meuressi, Turkwell, and Kerio in Uganda; Marich, Kibingei, Kisumu, Kendu Bay, Kibigori, Nairobi, Thika, Simba, Tsavo, M'buyuni, Maktau, Samburu, and Changamwe, Juba River.

932. **Poliospiza elgonensis** Grant. **Elgon Grey Serin.**

This is apparently a good form, having the breast almost uniform grey, not streaked as in *striatipectus*. I have only one female from south Mt. Elgon.

933. **Poliospiza striatipectus** Sharpe. **Pale Striped-breast Grey Serin.**

I saw this species at the Ravine, and Doherty has collected it at Escarpment.

934. **Poliospiza striolata striolata** Rüpp. **Northern Streaky Serin.**

My pale-breasted birds cannot be separated from typical *striolatus*, and have the underside whitish cream, streaked with blackish brown and pale yellow. This race meets with *P. s. affinis* from Kilimanjaro, just about the Nairobi district. Nairobi birds are decidedly tinged with buff.

Lake Naivasha, Nakuru, and Aberdare Mountains.

935. **Poliospiza striolata ugandae** van Som. **Elgon Streaky Serin.**

Bull. B.O. Club, xli. p. 114, 1921.

This race is nearest to *P. graueri* from Ruwenzori, but differs in being only slightly paler, less deep buff on the breast, while the upperside is as dark. Similar birds are found in Lake Kivu district. Besides my skins I have examined twelve others.

Mt. Elgon to the heath zone and forests of Kivu districts and Ankole.

936. **Poliospiza striolata affinis** Richm. **Southern Streaky Serin.**

The birds from the forests of Nairobi south to Ukambani and Kilimanjaro are very like typical *striolata*, but have the underside buff, not creamy white, and agree with Kilimanjaro birds, which are *affinis* of Richmond.

Kitui and Nairobi.

937. **Poliospiza albifrons albifrons** Sharpe. **Kikuyu White-fronted Great Serin.**

These birds all possess the white frontal band and are paler below than the birds found up-country. Grant united the Ruwenzori birds with *kilimensis* of Reichenow, the character of this race being the absence of the frontal band and other slight differences. I have examined birds from Ruwenzori and Kivu and find that they differ from the Mt. Elgon ones considerably, and I have been compelled to recognise a highland East African race as distinct, as mentioned later. My typical birds come from Nairobi, Kikuyu, N'gong.

938. ? **Poliospiza albifrons kilimensis** Rchw. ? **Kilimanjaro Great Serin.**

This type of bird is found in Western Uganda and I have compared a series in Tring Museum; but until I can examine Kilimanjaro specimens, I shall feel a doubt about them being identical.

Kagezi, South Ankole.

939. **Poliospiza albifrons** ? subsp.

9 ♂ 3 ♀ from Mt. Elgon and Molo seem to differ from *P. a. kilimensis* in being darker above and below, and in having the breast deep olive-brown. These differences seem to exist also in young birds. The bills, especially in the Molo birds, are larger and stronger.

Mt. Elgon south to Molo Forests: Elgon, Elgeyu, Maraquet, Molo.

940. **Poliospiza angolensis somereni** Hart. **Uganda Black-throated Serin.**

This is a good form, and birds obtained subsequent to the original description bear out the characters claimed for this race.

Kigezi in South Ankole; Entebbe and Jinja.

941. **Poliospiza reichenowi** Salvad. **Reichenow's Yellow-rumped Grey Serin.**

Type locality Shoa.

7 ♂ and 6 ♀ are rather less streaked on the underside than the single typical specimen in Tring, but otherwise agree. I am certain that when a series of typical birds is available, the East African birds will have to be separated under a new name.

Kisumu, Kibigori, Nairobi, Kyambu, Fort Hall, Embu, Simba, Bura.

942. **Poliospiza reichenowi** subsp. nov.

4 ♂ 1 ♀ are rather paler, less brownish, above than Kikuyu and southern birds, and have the breast whiter and not so streaked as in the typical race from

Shoa. They approach closely the coastal race *hilgerti*, but are not so greyish on the back.

South-west Lake Rudolf, Kobua, Kerio, and Marich in Suk.

943. **Poliospiza reichenowi hilgerti** Zedl. **Coastal Yellow-rumped Grey Serin.**

This pale race is found on the coast from north of Mombasa to South Somaliland. It is characterised by being pale greyish above with dark streaks to the feathers, and in having a wide white frontal band which is continued back as superciliary stripes, and by having the lower surface white.

Lamu and Manda.

944. **Poliospiza leucopygius** Sund. **White-rumped Grey Serin.**

A form of white-rumped Serin occurs in North-west Uganda, Nile Province, which is nearest to *leucopygius*, but may prove separable when sufficient material is got together.

(**Serinus donaldsoni** Sharpe. **Somali Thick-billed Serin.**

Probably occurs in the northern frontier of East Africa.)

945. **Serinus donaldsoni buchanani** Hart. **East African Thick-billed Serin.**

Bull. B.O. Club, January 1918.

This bird has been collected as long ago as 1913 and was represented in the collection of A. Blayney Percival, but its distinctness had not been recognised. I consider that it should be placed as a subspecies of the Somali bird as above. Besides in its enormous bill, it differs from *donaldsoni* by lacking a definite yellow eye-stripe. The known range is South-east Kilimanjaro to the Loita Plains.

Lake Jipe, Maktau (type locality), Campi-ya-bibi, Maungu, Voi.

946. **Serinus dorsostriatus** Rchw. ? **Nyanza Serin Finch.**

I am not satisfied that my birds are really true *dorsostriatus*. I have compared cotypes in the Tring Museum. While two are young birds, the other two are adults, and all have greener backs than my birds and white lower abdomens and under tail-coverts. This was mentioned in the original description, and led Shelley (*Birds of Africa*, vol. iii.) to place Sharpe's *maculicollis* as a synonym. I find that adult birds from south of the type locality in Tanganyika Territory have this character, while Kisumu and Uganda birds have the belly and under tail-coverts deep yellow like the breast, and greenish yellow backs.

Kisumu and Yala in East Africa; Jinja in Uganda.

947. **Serinus dorsostriatus dorsostriatus** Rchw.

Three full-plumaged adult birds have the belly and under tail-coverts whitish, and agree with the adult cotypes of *dorsostriatus* in Tring.

Loita in Kenya Colony; Dodoma in Tanganyika Territory.

948. **Serinus maculicollis maculicollis** Sharpe. **Somali White-bellied Serin.**

1 ♂, 11.vi.1917, agrees with Somali and South-east Ethiopian specimens and has a wing of 75 mm. It is brighter on the back and lighter yellow on the underside than birds from Kilimanjaro. I take it to belong to the typical race.

Kerio River, south Lake Rudolf.

949. **Serinus maculicollis taruensis** van Som. **Taru White-bellied Serin.**

Bull. B.O. Club, xli. p. 114, 1921.

I have come to the conclusion that possibly *S. m. harterti* Zedlitz (*Journ. f. Orn.* 1916) from South Somaliland can stand. I have also found that the bird inhabiting the East Kilimanjaro and Taru Desert cannot be united with the Somali or South Somali races, as it is darker on the back, with the shaft-spotting larger and the underside a richer yellow. Wings: ♂ 73, 71, 71, 70, 70; ♀ 70, 69, 69 mm.

East Kilimanjaro to South Ukambani and the Taru Desert: M'buyuni (type locality), Maungu, Maktau, Tsavo.

950. **Serinus (? flaviventris) loveridgei** van Som. **Mozambique Yellow Serin.**

Bull. B.O. Club, xli. p. 114, 1921.

Similar to *S. f. flaviventris*, but smaller and lighter yellowish green on the upperside and ear-coverts. Smaller than *marshalli*, upper tail-coverts greenish, ear-coverts darker. Wings, 70–72 mm.

Lumbo, North Mozambique. Type: ♂, 10.vii.1918, Loveridge leg., in Tring Museum.

951. **Serinus sulphuratus sharpei** Neum. **Sharpe's East African Large Yellow Serin.**

This is an excellent race, extending from Kilimanjaro (type locality) to Kisumu. I am not sure where it meets with *shelleyi*, but it might do so near the Yala River or in the Elgon district. It is larger than the Uganda race.

Kisumu, Kibos, Kibigori, Nakuru, Nairobi, Naivasha, Eldoret, Fort Hall, Kenia, Olgerei.

952. **Serinus sulphuratus shelleyi** Neum. **Uganda Large Yellow Serin.**

This race extends from the Elgon district west to Ankoli in Uganda: Masindi, Budongo, Busiro, Lugalambo, Jinja, Elgon.

953. **Serinus icterus barbatus** Heugl. **Uganda Little Yellow Serin.**

This is a small, highly coloured race, with wings from 60 to 65 mm. The female as a rule has a white chin, but in some this area is yellow as in the adult males. Ranging through Uganda, it comes east to Elgon, where it meets with a large bird nearest to the Camaroon species (*punctigula*), which I have named below.

Masindi, Bugoma, Busiro, Entebbe, Sezibwa, Kampala, Jinja.

954. **Serinus icterus madaraszi** Rehw. **Coast Grey-naped Yellow Serin.**

These birds are *not S. icterus* of Mozambique or South Africa, as they are slightly smaller, and have the crown, nape, and cheeks decidedly grey, as in *S. hartlaubi* of Angola; but they are rather darker grey, and darker greenish yellow above on the mantle. It is possible that these East African birds are not true *madaraszi*, though the description agrees.

Changamwe, Mombasa, Lamu, South Juba.

955. **Serinus pseudobarbatus** van Som. **Kavirondo Yellow Serin.**

Bull. B.O. Club, xl. p. 56, 1919.

This bird agrees best with *punctigula* of Camaroon, but the back is greyer and the bill larger. Wings, 67, 70, 71, 72, 72, 72, 72, 74 mm. Young birds are duller above and below and young females have small spots on the side chest. The range is from North Elgon to Kavirondo: Kisumu, Fort Ternan, Kibigori, Kibingei.

956. **Serinus flavivertex** Blanf. **Golden-crowned Serin.**

It is remarkable that eight males collected in the Molo Forest, Mau, and the Aberdare Mountains are not dark breasted, like those from Escarpment and Elgon, which agree with the typical form of Abyssinia.

Nairobi, Naivasha, Aberdare Mountains, Molo, and Elgon.

957. **Serinus ? capistratus** subsp. **Streaky Serin.**

I am unable to place three birds which have the *bills* just like a *Serinus*, but are coloured like a female *Spinus c. frontalis* or *kikuyuensis*. The male has the lores and chin greyish. They are adult breeding birds.

Kisumu and South Ankole in Uganda.

958. **Spinus citrinelloides frontalis** Rehw. **Uganda Black-faced Serin.**

One male is an entirely yellow variety.

Kigezi in South Ankole; Entebbe, Sezibwa, Mubango, Jinja.

959. **Spinus citrinelloides kikuyuensis** Neum. **East Africa Black-faced Serin.**

Neumann's type is not a fresh-plumaged bird, but rather worn and different-looking to clean moulted specimens. From the material available it would appear that the young male moults three times before assuming the full adult plumage ! ?

Nairobi, Fort Hall, Kenia, Kikuyu, Nakuru. 8 ♂, 3 ♀, 1 juv., 20.ix.1915.

960. **Spinus citrinelloides hypostictus ? Streaky Green Serin.**

These birds are very like the female of *Sp. c. kikuyuensis*, but paler and brighter above, and have the lores and chin greyish black without a definite black face, the underside more streaked. I have no material for comparison, so cannot place these birds with certainty. The type of *hypostictus* came from Kilimanjaro. The bills are shorter and bigger at the base than in *S. c. kikuyuensis*.

Kisumu and South Elgon.

961. **Emberiza tahapisi** Sm. **Brown Rock Bunting.**

The coloration on the inner web varies much, some being very dark and reaching the shaft as in *septemstriata*, while others have scarcely any rufous-cinnamon wash.

Younger birds have the colour more extensive than older ones.

Simba, N'ziu, Nairobi, Nakuru, Kisumu, Jinja, and Kigezi in South Ankole.

962. **Emberiza saturatior** Sharpe.

Has been recorded from Lake Stephanie and may extend into the south Lake Rudolf country.

963. **Emberiza affinis ? forbesi** Salvad. **Lesser Yellow-breasted Bunting.**

I am uncertain whether *forbesi* of Salvadori can stand, but as I have no typical birds I cannot make certain. I have compared the types of *forbesi* and *omoensis* and find a bird from Nimule just as dark as Neumann's *omoensis*, but my specimens are not so dark. The localities from which I have taken this bird are of interest and should be compared with those of *E. flaviventris* and *poliopleura*.

Singo in West Uganda; North Kerio River and Simu River, Elgon.

964. **Emberiza flaviventris** Steph. **Yellow-breasted Bunting.**

I do not consider that *affinis* and *poliopleura* should be looked upon as races of this bird: first, because this is a very widespread species; secondly, because all three forms occur together in part of their distribution within East Africa and Uganda. Cf. *Journ. f. Orn.* 1905, p. 359. I have obtained all three in the Suk country.

Kigezi in South Ankole in Uganda; Kibengei, Marich, Kacheliba, Nairobi, Simba.

965. **Emberiza poliopleura** Salvad. **Mottled-back Yellow-breasted Bunting.**

This species is specially common in the Taru country and ranges through South and North Ukambani to North Kenia and Baringo and thence to Lake Rudolf.

Taveta, Maktau, Campi-ya-bibi, M'buyuni, Simba, Magadi, Loita, Baringo, Kerio.

966. **Emberiza cabanisi orientalis** Shell. **Large Grey and Yellow Bunting.**

Has been recorded from Tingasi and is said to occur west of Victoria Nyanza.

967. **Emberiza cabanisi** ? subsp. nov. **Black-headed Yellow Bunting.**

On two occasions when my collectors went to South Masindi district they obtained a male of this bird. When compared with typical *cabanisi* they are evidently much darker, purer grey on the mantle, and have the head black, contrasting with the grey back, and with only a very minute indication of a central line on the crown in one specimen. I am certain that this will prove to be a distinct race.

Masindi and Budongo.

968. **Eremopteryx signata** Oust. **Cinnamon-headed Finch Lark.**

4 ♂ 1 ♀ collected by A. B. Percival are paler more greyish on the mantle than typical birds, but they are fresh-moulted specimens. The localities are of interest.

Kobua River, Lake Rudolf (1,500 feet), and Lorian Swamp.

969. **Eremopteryx frontalis melanauchen** Cab. **Black-bellied Grey Finch Lark.**

The capture of this bird so far south as the Lower Juba River is of great interest. Two specimens shot by A. B. Percival are paler on the back than others in Tring, but I have insufficient material to decide if this is constant.

Lower Juba River.

970. **Eremopteryx leucotis madaraszi** Rchw. **Black-bellied Brown Finch Lark.**

East African and Gallaland specimens are certainly different from *E. l. leucotis* by their heavier bills, which are nearly as powerful as in *E. l. smithi*, which has a lighter chestnut upperside.

Mt. Kamalinga, Moroto, in Uganda; Magadi and Loita in East Africa.

971. **Eremopteryx leucopareia** Fisch. **Red-capped Finch Lark.**

18 ♂, 8 ♀, 2 juv., and 10 birds from type locality collected by Loveridge. The latter are larger and paler than the series from Kisumu and North Elgon district, and more rufous on the crown and neck, and the females have a distinct rusty stripe over the eye, also a rusty collar which is wanting in the dark northern birds. Birds from Magadi are more typical.

Mt. Moroto and Kobua River in Uganda; Kacheliba, Kibengei, Kisumu, Kendu Bay, Kibos, Nairobi, Simba, Tsavo, in Kenya Colony; Tabora and Dodoma in Tanganyika Territory.

972. **Mirafra poecilosterna poecilosterna** Rchw. **Pink-breasted Singing Lark.**

3 ♂ collected by A. B. Percival are typical; and while two are very pale on the back and breast, the other is rather browner but it is a bit soiled.

Lorian Swamp and Juba River.

973. **Mirafra poecilosterna massaica** Rchw. **Taru Pink-breasted Singing Lark.**

M. jacksoni Og.-Grant.

I do not consider that this bird should be kept in the genus *Mirafra*! Besides the slender shape of its bill, the formation of its feet, the colour-scheme generally and especially of its wings, also its habits, are rather different. It is a great tree-percher, quite apart from perching when disturbed, and its song is of a different character. Grant must have overlooked the name *massaica* given to a bird from the Kilimanjaro district (which is undoubtedly the same as the Kikuyu bird), when he named the latter *jacksoni*. This race is darker above and below than the typical one from the Lower Tana River.

Lake Jipe, Taveta, Maktau, Campi-ya-bibi, Maungu, Tsavo, Simba, Nairobi River. 23 ♂ 10 ♀.

974. **Mirafra hypermetra hypermetra** Rchw. **Great Black-breasted Lark.**

This bird is rather uncommon. Its great size and the black breast-patches distinguish it at once from the "*africana*" group of Larks.

Campi-ya-bibi and Northern Gausso N'yiro.

975. **Mirafra africana tropicalis** Hart. **Uganda Rufous-crowned Red-winged Lark.**

Nine specimens from Uganda and Kisuma are typical *tropicalis*; but in the Loita Plains, especially in the plains towards the east of Sotik, we find birds which are intermediate between *tropicalis* and *dohertyi*, having the rufous crown of the former and the body plumage of the latter, but more rufous on the mantle and underside. A series from the South Kavirondo and Loita may show this to be constant, in which case the form should be recognised; I have so far only four.

Semliki, Masindi, Bugoma, Mubendi, Entebbe, Jinja, in Uganda; South Elgon and Kisumu in East Africa; also Loita and South Sotik.

976. **Mirafra africana dohertyi** Hart. **Kikuyu Red-winged Lark.**

With twenty skins of my own and twenty others collected by A. B. Percival and J. P. Cook, I find that this is a fairly good race which can be described as a darker form of *M. a. athi*; but on the high ground of the Athi plains, just outside Nairobi, we get intermediate birds, and others, which are true to the types of the two races which meet in this district. Extremes are, however, very distinct. In my series of over forty skins, and with the birds in Tring, the gradual graduation from one form to the other is beautifully shown, and with the Loita birds we get the connecting link between *dohertyi* and *tropicalis*. I wish to emphasise this, because in my field work and in the large series examined, I have been unable to find links between *M. a. athi* and *M. a. harterti*. The latter was described as a race of *africana* and as such has been united by Hartert (Nov. Zool. May 1919) with *tropicalis*; but how does one overcome the fact that in between *harterti* and *tropicalis* there are *two pale forms—athi* and *dohertyi*?

Kikuyu, Naivasha, Nakuru, Lumbwa, Maraquet, and Eldoret.

977. **Nirafra africana athi** Hart. **Athi Pale-backed Lark.**

For remarks on this race, see under previous form. This is the palest of the "*africana*" larks in East Africa. This should be noted, in view of the coloration of the next form.

Athi Plains, Kapiti Plains, Magadi, N'gong, Nairobi, Kyambu, Kenia, Fort Hall.

978. **Mirafra "africana" harterti** Neum. **Large Rufous Lark.**

I have examined over a dozen skins besides my own nine specimens, and am satisfied that Neumann was right to describe it, although he had a poor material. Since seeing my birds, Dr. Hartert has altered his views regarding this very rufous Lark (Nov. Zool. May 1919).

If *harterti* is a form of *africana*, which I very much doubt, how is it that we get the very palest race next to the most rufous? It may be suggested that the

character of the soil, etc., is the determining factor; but this rufous bird is not found only on red soil, nor yet the pale *athi* on " black cotton " soil. So far I have no proof of the presence of the two forms in the same locality, except in South-west Ukamba.

Simba, Kiboko River (type locality), Tsavo, Serengeti Plains.

979. **Mirafra fischeri fischeri** Rchw. **Fischer's Coastal Flappet Lark.**

I collected seven birds at the type locality and neighbouring districts. These are characterised by being small (compared with other races), fairly dark above, and pale below, with small spots on the chest, which is washed with brownish. I find in these two types of plumage a blackish or dark and a slightly rufous one. These plumages are not due to sex or season, as such are found in breeding and non-breeding birds. Wings: ♂, 75, 75, 76, 76, 76 mm.; sex ? prob. ♀, 70 mm.; ♀, 70, 72, 72, 73 mm.

There is no distinct greyish " bloom " to either of the plumages. In the red phase it has a more barred appearance. The outer tail-feathers are pale buff with black along the edges to the inner webs. Such birds are met with at Mombasa, Changamwe, Mazeras, Maji-ya-chumvi, and M'koi.

This species extends along the coast of the Tanganyika Territory, but in North Mozambique and Nyassaland has developed into the following form.

980. **Mirafra fischeri zombae** Grant. **Mozambique Flappet Lark.**

Four blackish ♂, two brownish ♀, are very like *fischeri*, but larger, having wings of ♂ 80, 79, 78, 78, ♀ 76, 77 mm. The whole upperside with a distinct *greyish bloom, in both the blackish and brownish phases*. The brownish phase is more pronounced in this form than in true *fischeri*. The spotting on the breast is rather smaller. Birds of both sexes of the same coloration were collected in the same month.

Lumbo, North Mozambique.

Further inland we get a rufous bird, possibly a form of *fischeri*, called :—

981. **Mirafra " fischeri " torrida** Shell. **Rufous Flappet Lark.**

? *M. rufocinnamomea.*

Six specimens in dark red, seven in bright rufous plumage. The plumage is very rufous above and below with a " brick-red " chest-band, which is spotted in the region of the lower throat. The barring on the back is present in both varieties. These birds are somewhat like *M. tigrina* of Angola, but more rufous, not greyish rufous. In comparison with *fischeri* and *zombae* they are larger, and differ in colour. They have *rufous buff outer* tail-feathers. Wings: ♂, 85, 83, 83, 82, 82; ♀, 80, 80, 80, 78, 78 mm.

These birds do not resemble the few really typical *rufocinnamomea* I have had for comparison, nor do they agree with the plate of *torrida* in Shelley's *Birds of Africa*, vol. iii, but the locality is the same. We do not get a blackish bird in the district where this red bird occurs. Both varieties were collected of both sexes and at the same months.

Simba, Teita, Kitui, Thika, Fort Hall.

In Western Uganda is found a bird very like the above, but much paler

below and paler and brighter on the upperside. Of this I possess only 2 ♂ and 1 ♀. They have wings of ♂ 78, 78, ♀ 77 mm., and come from Ankole.

In Usambiro Emin collected much darker greyish rufous birds, which agree with none of mine, though Shelley referred them to *M. fischeri*.

Now, alongside the Uganda reddish birds and between them and the East African reddish ones we get a very dark blackish bird, much like *fischeri* but blacker above when in the black phase, and darker when in the brown phase, also larger. They are also much darker than *M. f. zombae*, and the spotting on the breast is large. Similar birds to these, collected by the Ruwenzori Expedition, were referred by Og.-Grant to *M. zombae* and by Reichenow to *M. fischeri*. As a matter of fact they belong to neither, and I have named them :—

982. **Mirafra fischeri kawirondensis** van Som. **Nyanza Black Flappet Lark.**

Bull. B.O. Club, xli. p. 125, 1921.

11 ♂ ♀ in blackish, 5 in brownish plumage. These birds are also exhibiting the two phases, black and brownish, but it must be understood that the several forms I have enumerated, although alike in exhibiting this peculiarity, are perfectly distinct from one another. In my series I have breeding birds of both sexes, some black, some brownish, and of various seasons. Blackish birds show no bars, brown ones do.

Wings: ♂, 81, 80, 80, 80, 80, 80, 78, 78; ♀, 80, 78, 78, 76, 76, 76, 75, 75, 75, 74, 74 mm.

These birds *lack* absolutely the *greyish bloom* found in *M. f. zombae*. The outer tail-feathers are dark buff. A male bird from Soroti Uganda, with wings of 78 mm., has a very much more slender bill than the others and may be a different East Uganda form or an aberration. More material from there is required.

Kisumu, Karungu, Kendu Bay, Kibigori, in East Africa; and Soroti and Entebbe in Uganda.

983. **Mirafra alopex** Sharpe. **Rufous Scrub Lark.**

This is a very deep rufous-backed bird with dark stripes, found in the East Kilimanjaro plains to South Ukamba, and it must extend north to the Northern Uasso N'yiro, skirting the higher levels and not rising to more than 3,000 feet.

Higher than this and up to 5,000 feet we get a paler, less rufous bird, called *intercedens*.

Makindu, Tsavo, Maktau, Bura, Campi-ya-bibi, Taveta.

984. **Mirafra intercedens** Rchw. **Paler Scrub Lark.**

My specimens in good plumage agree well with the fresh birds collected by Ansorge in the same locality (and identified by Reichenow as his *intercedens*) from which I obtained my specimens. These birds are very like *alopex*, but paler, less dark rufous, also narrower, but more thickly spotted on the chest. Shelley's figure in *Birds of Africa*, vol. iii, is incorrect, and therefore misleading. The type of plumage of this bird is not the same as *alopex*. I keep it as a species until its range is definitely known.

Simba, Kiboko River, Magadi.

985. **Mirafra longonotensis** van Som. **Naivasha Grey-necked Lark.**

Bull. B.O. Club, xl. p. 57, December 1919.

9 ♂ ♀ and 7 collected by Doherty appear to be a very dark form nearest to *intercedens*, but differ from that bird in lacking the sandy tinge to the feathers of the mantle, also possessing, in fresh adult stage, a distinct greyish colour. When this plumage gets worn, the general tone of the mantle becomes much darker, almost blackish.

Loita Plains, South Naivasha, and Nakuru.

986. **Mirafra** sp. near **intercedens.**

3 ♂ shot in May 1917 cannot be matched with any of the specimens in Tring, though they are nearest to my *M. intercedens*, but between these pale birds and *intercedens* we get the blackish form described above. More material may prove them to be a distinct race. They are much like *intercedens*, but very much paler—more sandy rufous above and much paler below, the breast-spots very faint. They probably represent a desert form of *intercedens*.

Kerio River, South Lake Rudolf, and Marich, Suk Hills.

987. **Mirafra albicauda** Rchw.

Lake Magadi, Karungu Bay, Olgerei.

988. **Mirafra schillingsi meruensis** ?

Lake Nakuru, Escarpment.

(Single males each from Taveta, Mt. Moroto in Uganda, and Lake Nakuru remain doubtful for the present.)

989. **Mirafra cantilans marginata** Hawker. **Pale White-tailed Lark.**

1 ♂, shot on Mt. N'yiro, Northern Guasso N'yiro, agrees perfectly with specimens of *marginata* in Tring; as does also a specimen collected by Butler in the Sudan, which has been called *chadensis*. I wonder if the latter differs from *marginata* ! ?

990. **Mirafra cantillans** ? subsp. nov. **Magadi White-tailed Lark.**

3 ♂ 2 ♀ from Lake Magadi differ from *marginata* in being generally darker especially on the crown, and having the markings on the back not so streaky.

991. **Pseudalaemon delamerei** Sharpe. **Athi Long-billed Lark.**

These extraordinary long-billed little larks are not common. Two specimens collected in July by A. B. Percival are not so dark as the two in Tring, but they are in fresh unabraded plumage.

Kapiti Plains.

992. **Calandrella cinerea saturatior** Rchw. **East African Red-capped Lark.**

I think this race should be recognised; it is generally darker than typical *cinerea*, the rufous patches on the side of the chest and the crown darker.

In Uganda is found an even *darker bird*, which cannot be placed under any named race.

Nairobi, Naivasha, Nakuru, in East Africa (ten specimens); Entebbe and Buzileranjuvo in Uganda (2 ♂).

993. **Galerida cristata somaliensis** Bianchi.

These birds have wings of 102–105 mm. and the thick bills characteristic of *somaliensis*.

Kobua River, West Lake Rudolf. 5 ♂ 2 ♀. Also collected by J. Allen Turner for Meinertzhagen.

994. **Macronyx sharpei** Jackson. **Sharpe's Pale-breasted Long-clawed Pipit.**

A high country species. The young in first plumage is very like a female but paler above, and almost uniform sandy buff below, with just a tinge of yellowish on the abdomen. The breast has a few black spots.

Kenia, Uasingishu, Lake Narasha, Aberdare Mountains.

995. **Macronyx croceus** Vieill. **Yellow-throated Long-clawed Pipit.**

Eastern birds are larger than typical ones which I have examined. More material required!

Budu, South Ankole, Entebbe, Kibingei, Kimiriri, Kisumu, Kibigori, Nakuru, Naivasha, Burnt Forest, Fort Hall. Twenty-three specimens.

996. **Macronyx aurantiigula** Rchw. **Orange Long-clawed Pipit.**

The young bird is buffy below with a faint wash of yellow on the breast. It is an inhabitant of the scrub and thorn-bush country.

Taru, Samburu, Maji-ya-chumvi, Taveta, Maktau, M'buyuni, Sagala.

997. **Macronyx ameliae wintoni** Sharpe. **Red-throated Long-clawed Pipit.**

Birds from the type locality, Kavirondo, differ somewhat from those obtained in higher altitudes. It remains to be seen whether the differences are constant. The young in first plumage is paler above, more sandy; it lacks all pink on the throat, and has just a pink tinge on the middle of the abdomen. Rather partial to swampy ground and high grass country.

Kisumu, Kibigori, Elgeyu, Nakuru, Kenia.

998. **Anthus melindae** Shell. **Malindi Pale Striped-flank Pipit.**

Apparently a rare species. Two birds agree well with the description. It is quite a distinct species and should not be confused with any other.

M'koi and Samburu.

999. **Anthus nivescens** Rchw. **Grey Desert Pipit.**

This bird is nearest to *sokotrae* Hart. (Nov. Zool. 1917), but differs in the breast-markings and in being larger. Wings, 103 mm. It agrees well with specimens collected by Archer in North Somaliland.

Lower Juba River. ♂ obtained by A. Blayney Percival.

1000. **Anthus campestris** Vieill. **European Tawny Pipit.**

Two ♂, 26.iii.1918, undoubtedly belong to this form. They differ slightly from the typical birds by being more sandy above and below, but can be matched by a specimen from Algeria and by skins collected by Archer in Somaliland in June.

Tsavo.

1001. **Anthus richardi** Vieill. **Richard's Pipit.**

The capture of these birds in East Africa is of the greatest interest because it extends the winter range considerably. One specimen has the hind claws 20, the other 18 mm. long. The latter specimen is rather rufous underneath and rather resembles the Indian species.

Kisumu, and Lake Rudolf, Kobua River, Kyambu near Nairobi.

1002. **Anthus blayneyi** van Som. **East African Pigmy Pipit.**

Bull. B.O. Club, December 1919.

This remarkable Pipit is nearest to the brown form of *brachyurus* called *calthropae* by Shelley, but differs from that bird by being paler and considerably smaller, besides having the inner secondaries as long as or almost as long as the primaries, and having the chest-streaks finer. Wings: ♂, 68–70; ♀, 65–67 mm.

The wing-measurements of the South African bird are 74–76 mm.

Simba, Loita, Kapiti, Olgerei.

1003. **Anthus rufulus cinnamomeus** Rüpp. **Cinnamon Pipit.**

A very common species, richer coloured in Uganda than in East Africa; but as the coloration is not constant in either country, they must be united, for the time being.

Entebbe, Jinja, Bukedi, in Uganda; Kisumu, Kibingei, Kendu Bay, Kibos, Nakuru, Kenia, and Nairobi.

1004. **Anthus rufulus** ? subsp.

Four adult and three young birds from South Ankole are very much darker on the mantle and richer below than northern specimens of *rufulus*. The bills are heavier and stronger.

South Ankole and Kivu district.

1005. **Anthus nicholsoni longirostris** Neum. **Long-billed Mottled Pipit.**

Neumann described this East African race as a form of *nicholsoni*, and I consider he was right. Dr. Hartert, on the other hand, states that this bird should be made a form of *sordidus*, because the type of *sordidus* must have been a bird with mottled back. Thus, as *sordidus* has priority over *nicholsoni*, the former name must be used for the group. I have spent much time over these birds, examining the material in Tring and paying attention to the feature which, according to Dr. Hartert, is characteristic of this group, *i.e.* the slender, straight bill, but I have failed to become reconciled to his views and would support Prof. Neumann. My reasons for this opinion are: (1) That freshly moulted birds of

the old "*sordidus*" group sometimes show a slight mottling to the mantle, caused by the edges of the feathers being a shade paler than the centres, but this is soon lost and the birds become uniform as the type of *sordidus* is, and as are Neumann's topo-types, except the one fresh bird. (2) Birds of the old *nicholsoni* group never lose the mottled appearance, no matter how worn they become, because the pale edges to the feathers extend almost to the base and are not limited to the tips. (3) The measurements of the types are small, such as are met with in the *sordidus* group. (4) I find the shape of the bill is not a constant feature.

Nakuru, Naivasha, Sagala, Kisumu.

1006. **Anthus leucophrys turneri** Meinertzh. **White-throated Black-backed Pipit.**

Anthus gouldi turneri Meinertzh., *Bull. B.O. Club*, xli. p. 24, 1920.

These birds are uniform dark blackish brown on the back like *omoensis* of Neumann, but paler brownish buff below, with the throat white, contrasting with the rest of the underside. The breast is spotted with large distinct arrow marks.

Wings: ♂, 91, 91, 92, 95, 95, 95, 97, 98; ♀, 87, 87, 88, 89, 90, 90 mm.

Bukoba, Lugalambo, Mubendi, Entebbe, Kyetume, in Uganda; Elgon Kibingei, Kituni, Kisumu, Nakuru.

1007. **Anthus leucophrys goodsoni** Meinertzhagen. **Goodson's Pipit.**

Bull. B.O. Club, xli. p. 24, 1920.

These birds represent a race of the large pale brownish Pipit of Transvaal. A similar bird occurs in Angola, which must be called *neumanni* Meinertzh., as Neumann's name *angolensis* is preoccupied. Upperside pale greyish drab-brown, paler brown on the rump. A pale eye-stripe. Underside pale buffy, the throat being of the same colour as the belly. The breast with large indistinct diffuse brownish black markings.

Wings: ♂, 99, 100, 100, 100, 101, 102; ♀, 97, 97 mm.

East African highlands: Nairobi, Nakuru, Naivasha, Kenia.

1008. **Anthus trivialis** Linn. **Tree Pipit.**

Fairly common in winter. Apparently adult birds have not completed their moult until October or later; others leave their winter quarters before assuming full summer dress—these are probably young birds. An albino, shot 17.x.1913, is pale buffy grey, but has all the normal markings in a subdued form.

Maraquet, Eldoret, Elgeyu, Elgon, Nairobi, in East Africa; Masindi and Lugalambo in Uganda.

1009. **Anthus cervinus** Pall. **Red-throated Pipit.**

Three spring females are like adult males, but others have the pink limited to the throat only. One apparently adult spring male has no red on the throat. Many late March birds have not completed their moult and leave East Africa before doing so.

Nairobi, Naivasha, Nakuru, Kisumu. Numerous; over fifty collected.

1010. Tmetothylacus tenellus Cab. **Golden-yellow Pipit.**

Much variation exists in the males. The young male in first plumage is like the adult female, but has practically no yellow on the abdomen, and the breast has a few brown spots; the general colour is duller. The first moult produces a marked change on the underside which becomes yellow, the black gorget is moulted, but the throat remains buffy with just a slight tinge of yellow, the crown and upperside are more greyish green than yellow-green. The following moult produces a yellow throat, a complete black gorget, and the upperside becomes yellowish green, though, until the feather-tips get worn off, it still retains a greyish appearance.—This species appears to range throughout the dry thorn-bush country from Mombasa and East Kilimanjaro north to East Kenia and Somaliland. I found it nesting in May and July.

1011. **Motacilla aguimp** Dumont. **African Pied Wagtail.**

M. vidua Sund.

Masindi, Bira, Budongo; Molo, Fort Ternan, and Nairobi.

1012. **Motacilla capensis wellsi** Og.-Grant. **Uganda Olive-backed Wagtail.**

Specimens from Nairobi and Molo agree with typical *wellsi* in colour.

1013. **Motacilla alba alba** Linn. **European White Wagtail.**

V regular migrant in small numbers.

Mporogoma, West Elgon; Kisumu and Nairobi.

1014. **Motacilla clara** Sharpe. **Long-tailed Wagtail.**

This bird has the same habits and build as the European Grey Wagtail.

West Elgon, Kyambu, and Nairobi.

1015. **Motacilla cinerea cinerea** Tunst. **European Grey Wagtail.**

Elgon, Maraquet, Kibras, Yala, Londiani.

1016. **Motacilla flava feldegg** Michah. **Black-headed Wagtail.**

Very few Black-headed Wagtails migrate south of Lake Victoria. During the winter they are fairly plentiful in the Kisumu district.

Jinja in Uganda; Kisumu and Nairobi.

1017. **Motacilla flava thunbergi** Billberg. **Grey-headed Wagtail.**

Two birds have white throats and thus resemble very closely *M. f. cinereocapilla*, and two have distinct superciliaries and blackish ear-coverts like *dombrowskii*.

Entebbe, Elgon, Kobua River, Lake Rudolf, Kisumu, and Nairobi in British East Africa.

1018. **Motacilla flava flava** Linn. **Blue-headed Wagtail.**

Fairly common, often associating with *M. f. rayi* and *campestris*.

Bumasifa, Mt. Elgon, Kobua River, Lake Rudolf, Kisumu, Nairobi.

1019. **Motacilla flava beema** Sykes. **Pale-headed Wagtail.**

Not very common, and recognisable in the field only when in full plumage.
Kobua, Lake Rudolf, Kisumu, Nairobi.

1020. **Motacilla flava** subsp. ?

Two specimens with almost white heads were shot in November 1917 and April 1918. A totally white-headed bird was also procured. Are these albinistic birds or *M. f. leucocephala* ?
Nairobi, Soroto.

1021. **Motacilla flava rayi** Bp. **British Yellow Wagtail.**

Fourteen males are undoubted specimens of the British Wagtail, having dark green heads and distinct yellow eye-stripe. The presence of this bird in East Africa is remarkable.
Entebbe, Nairobi, and Kyambu.

1022. **Motacilla flava campestris** Pallas. **Yellow-headed Wagtail.**

Two specimens have greyish backs and one has a very pale head, almost cream-yellow. The April birds have bright canary-yellow heads. A very common migrant, by far the most numerous in Nairobi district.
Victoria Nyanza, Lauru, Nairobi, Naivasha, Nakuru, Kisumu, Kobua; Bira and Entebbe.

1023. **Trichophorus calurus ndussumensis** Rchw. **White-throated Green Bulbul.**

This is a fairly common bird in Uganda and ranges from the Lake Albert and Toro districts to Elgon, but does not appear to extend to the Nandi Range. Young birds in first plumage are like females, but generally duller and have a brownish tinge to the wings, rump, and tail.
Budongo, Bugoma, Entebbe, Mubango, Masaba, Mabira, Lugalambo, Elgon.

1024. **Bleda eximia ugandae** van Som. **Large Green-tailed Olive Bulbul.**

Fifteen additional specimens show that the characters claimed for this race hold good. It is not so common as the next species, but covers the same distribution.
Lugalambo, Sezibwa, Mubango, Bugoma.

1025. **Bleda syndactyla woosnami** Og.-Grant. **Large Red-tailed Olive Bulbul.**

With a series of twenty-one skins I find that the character of the small bill mentioned by Grant in the original description does not hold good, several of my male birds having larger bills than the typical West African *syndactyla*, but the generally brighter plumage is a constant feature.
Lugalambo, Budongo, Bugoma.

1026. **Atimastillas flavicollis flavigula** Cab. **Uganda Yellow-throated Bulbul.**

? *A. pallidigula.*

? *A. shelleyi* Neum.

Thirteen specimens have yellow throats and range from Semliki to Elgon and south along the shore of Lake Victoria, where the type of *shelleyi* came from. I fail to recognise this form from specimens from Karungu, but possibly Neumann's race does not range up so far.

Karaungu, Fort Ternan, Kimiriri, Nyarondo, in British East Africa ; Kyanja Budu and Kagezi in Uganda.

Atimastillas sp. ? White-throated Grey Bulbul ?

Nine specimens from North-west Uganda—Masindi and Budongo—all have white throats, not yellowish. They are not *pallidigula* of Sharpe from Entebbe, for Entebbe birds have yellow throats. A series may show this to be constant.

Masindi and Budongo.

1027. **Prosphorocichla orientalis** Hartl.

Has been recorded from Uganda.

1028. **Ixonotus guttatus** Verr. **Speckled-wing Bulbul.**

This bird has been obtained in the Ruwenzori Range and Budongo Forest. There is a specimen in Tring taken by Seth-Smith in the latter place.

1029. **Phyllastrephus terrestris suahelicus** Rchw. **Olive Scrub Bulbul.**

Described from the Pangani. This bird probably ranges into Vanga district.

1030. **Phyllastrephus strepitans strepitans** Rchw. **Brown Scrub Bulbul.**

? *P. s. fricki* Mearns.

These birds were obtained in various localities, but I fail to recognise any characters warranting separation. The wings vary from 65 to 82 mm.

Juba, Lamu, Sekoke, Changamwe, Samburu, Masongoleni, Sagala, Lake Jipe, and Simba.

(**Phyllastrephus strepitans sharpei** Shell.

I doubt if this race—if recognisable—extends into East Africa.)

1031. **Phyllastrephus strepitans pauper** Sharpe. **Somali Brown Scrub Bulbul.**

I very much doubt whether this race can stand close investigation. These birds are, on the whole, larger than typical specimens of *Strepitans.*

Kobua, Lake Rudolf, Mt. Moroto, in Uganda.

1032. **Phyllastrephus cerviniventris** Shell. **Yellow-legged Olive Scrub Bulbul.**

This is not a common species. East African birds may be found to differ from typical Nyassaland specimens, but I have no material for comparison.

Bura, Taveta, Lake Jipe.

1033. **Phyllastrephus cerviniventris lonbergi** Mearns. **Kenia Yellow-legged Olive Bulbul.**

I have not examined a specimen of this race, but from the locality it must certainly be different from the typical bird. The type came from Meru, Kenia.

1034. **Phyllastrephus placidus placidus** Shell. **Kikuyu White-throated Forest Bulbul.**

Wings of my seven birds and others in Tring measure : ♂ 85–90, ♀ 75–80 mm. Common in the Karura and Rueraka Forests.

Kiknyu and Kyambu Forests.

1035. **Phyllastrephus placidus keniensis** Mearns. **Kenia White-throated Forest Bulbul.**

With only one ♂, shot on Mt. Kenia, April 1919, I am unable to form an opinion on this race, so have to admit it without criticism.

1036. **Phyllastrephus flavostriatus** Sharpe. **Yellow-streaked Forest Bulbul.**

According to Oberholser, this species ranges into British East Africa.

1037. **Phyllastrephus fischeri** Rchw.

This species from the Pangani probably reaches into the Vanga district.

1038. **Phyllastrephus olivaceogriseus** Rchw. **Ankole Grey-backed Bulbul.**

This is a very distinct species which inhabits the central lake regions. My specimens are particularly grey on the head and mantle.

Kigezi, South Ankole. 2 ♂ 1 ♀, September 1919.

1039. **Phyllastrephus cabanisi hypochlorus** Jackson. **Uganda Olive Forest Bulbul.**

I have no doubt that this is a race of *cabanisi*, as the other races do not overlap. Wings, 65–87 mm.

Mubango, Lugalambo, Entebbe, Mabira, Kyetume.

1040. **Phyllastrephus cabanisi succosus** Rchw. **Uganda Yellowish Olive Forest Bulbul.**

Although described from Bukoba, on the west of Lake Victoria, this race does not occur in Uganda Proper. It, however, crops up again on Elgon and extends south along the Nandi Escarpment to Ravine and Molo. I find no difference between Elgon and Kivu birds, except that the latter are a shade darker, but this is not sufficiently definite to warrant separation.

Elgon, Kimiriri River, Kibingei River, Kakamegoes, Nyarondo, Kibigori, Elgeyu, Maraquet, Molo.

1041. **Phyllastrephus icterinus seth-smithi** Hart. and Neum. **Budongo Yellow Forest Bulbul.**

This is an excellent race, being much bigger than the typical western birds, but some of the small females are absolutely indistinguishable from males of

P. i. icterinus. Wings: ♀, 63–75; ♂, 85–93 mm. The difference in size between the sexes is remarkable.

Budongo, Bugoma, Masindi.

1042. **Phyllastrephus albigularis leucolaima** Sharpe. **Uganda Pale-throated Forest Bulbul.**

P. ugandae Rchw.

P. graueri Neum.

P. a. albigularis van Som. (nec Sharpe !), *Ibis*, 1916.

Although I kept large and small birds separate in my paper in the *Ibis*, 1916, I am now compelled to unite all these pale-throated Bulbuls under the name *leucolaima*. I find that the females have wings of 64–75, the males 75–90 mm. It is most amazing that some females should be almost half the size of the males.

Bugoma, Budongo, Mubendi, Mubango, Lugalambo, Sezibwa, Elgon.

1043. **Baeopogon indicator chlorosaturata** van Som. **White-tailed Green Bulbul.**

My series shows these birds to be constantly darker and more greenish below than the typical race. The young is greyish below, dull olive-green above, and the outer tail-feathers are pure white.

Budongo, Bugoma, Sezibwa, Yala, Elgon.

1044. **Chlorocichla flaviventris mombasae** Shell. **Coastal Large Yellow Bulbul.**

Ten typical specimens with the wings measuring: ♂ 103–110 (average 107), ♀ 97–102 (average 98) mm. The largest bird of this series is from Taveta.

Mombasa, Manda, Kitui, and Taveta.

1045. **Chlorocichla flaviventris ? meruensis** Mearns. **Kikuyu Large Yellow Bulbul.**

The only difference I can find between these up-country birds and the coastal form is the slightly larger size. The males have wings of 108–114, females 102–108 mm., and perhaps the coloration is brighter. As I have no birds from Meru or Kenia, I am unable to state definitely whether these birds are really the same as the race described by Mearns. The nestling is somewhat like the female, but duller, and the underside buffy with only a slight yellow tinge, the wing-coverts tinged rufous.

Kyambu and Nairobi Forests.

1046. **Chlorocichla laetissima** Sharpe. **Elgon Large Yellow Bulbul.**

C. hypoxantha Hart. (not Sharpe), *Nov. Zool.* 1900.

Eight typical specimens cannot be distinguished from others from the Kivu and Semliki district, except that there is a slight difference in size, but not sufficient to warrant separation.

Elgon, Nandi, Nyarondo, Yala.

1047. **Andropadus insularis subalaris** Rchw. **Mombasa Little Yellow Bulbul.**

The character given for this race, namely, the buffy yellow, not bright yellow under wing-coverts, and inner edges to the wing-feathers, holds good; but Reichenow is wrong in stating that the Manda and Lamu birds are typical *insularis*, which is apparently limited to the Island of Zanzibar and the adjacent coast, north to the Pangani.

Lamu, Manda, Malindi, Changamwe, Mombasa, Samburu, Voi, M'buyuni, Sagala, Taveta, Tsavo, Kitui.

1048. **Andropadus insularis somaliensis** Rchw. **Somali Yellow Bulbul.**

I am unable to form an opinion on this race for want of material, but a single Juba River specimen, collected by A. B. Percival, is similar to the Lamu birds. The type is also from the Juba.

1049. **Andropadus fricki** Mearns. **White-eyed Yellow Bulbul.**

From the description this appears to be a good species, but whether *A. f. kitungensis* is separable remains to be proved.

1050. **Andropadus kagerensis** Rchw. (From Budden, Victoria Nyanza.)

Requires confirmation. Is probably the same as *Phyll. cabanisi hypochloris* Jackson.

1051. **Andropadus curvirostris ? alexanderi** Oust. **Large Green Forest Bulbul.**

Andropadus curvirostris curvirostris van Someren, *Ibis*, 1916.

In the original description it is stated that the under wing-coverts are of the same colour as the breast, but I find that in my large series only twenty specimens have the under wing-coverts olive-green, all the others yellowish. In size these birds agree, as they also do with the rest of the general description.

The type of *A. c. alexanderi* should be examined before one could form a definite opinion as to whether these birds are separable. The wings vary from 75 to 90 mm. Although I kept two birds separate in the *Ibis*, 1916, I am now compelled to unite them; but it is possible that these Uganda birds will have to be recognised as a distinct race of *curvirostris*.

Bugoma, Budongo, Mubango, Sezibwa, Elgon.

1052. **Arizelocichla nigriceps** Shell. **Black-headed Green Bulbul.**

Is apparently limited to the Kilimanjaro district.

1053. **Arizelocichla striifacies** Rchw.

Appears also to be limited to the Kilimanjaro district.

1054. **Arizelocichla kakamegae** Sharpe. **Little Grey-headed Green Bulbul.**

It is extraordinary that this bird should occur in regions where *A. kikuyuensis* exists, as it differs only slightly in coloration and size.

Kakamegoes, North Kavirondo, and Mt. Elgon.

1055. **Arizelocichla tephrolaema kikuyuensis** Sharpe. **Kikuyu Grey-headed Green Bulbul.**

A common bird in the high forest country. Elgon specimens have wings 80–90 mm. and small bills; in fact, the females have bills equal in size to *A. kakamegae*, while of typical birds the wings vary from 87 to 98 mm. Ankole specimens have wings of 85–94 mm. Young birds are very like *A. kakamegae* in coloration, but have the crown of the head greenish, not greyish.

Kikuyu, Molo, Maraquet, Elgeyu, Londiani, Burnt Forest, in East Africa; also Elgon, Bumasifa, and South Ankole.

1056. **Stelgidillas gracilirostris chagwensis** van Som. **Uganda Grey-breasted Bulbul.**

In comparing my fine series with birds obtained from North Kavirondo, Kakamegoes, I find that the latter agree well with the exception of two which approach *S. g. percivali*. The rest are true to type. The two forms meet in Nandi.

Budongo, Bugoma, Mubango, Masindi, Kyetume, Bumasifa, Elgon, and Kakamegoes. Also Lerundo, Kibrass, Kaimosi, in Meinertzhagen's Collection.

1057. **Stelgidillas gracilirostris percivali** Neum. **East African Grey-headed Bulbul.**

The true home of this race is the forests of Kikuyu. The pale, creamy-grey breast at once distinguishes this race. It ranges north to Nandi.

Kyambu, Kikuyu, and Molo.

1058. **Charitillas gracilis ugandae** van Som. **Uganda Little Green Bulbul.**

My series endorses the validity of this race. The grey throat and breast are distinctive. Wings, 65–75 mm.

Bugoma, Budongo, Mubango, Lugalambo, in Uganda.

1059. **Charitillas minor ?**

Two specimens from Toro are very small-billed and have wings of 62, 64 mm.; they have the grey on the underside limited to the throat. More material required!

1060. **Charitillas kavirondensis** van Som. **Kavirondo Grey-bellied Green Bulbul.**

Bull. B.O. Club, xl. p. 95, 1920.

This new species is nearest to *C. ansorgei* from Nigeria, but differs from that species in being larger (wings 70–80, compared to 65–73 mm.), in being darker olive above and darker on the crown, breast and belly paler greyish, flanks not so olive-brownish. The throat is the same colour as the breast, *i.e.* grey. Beside these birds there are others taken by Turner when collecting for Meinertzhagen, and now in the Tring Museum.

North Kavirondo to Elgon: Kakamegoes and Nyarondo, Kimiriri River, South Elgon.

1061. **Stelgidocichla latirostris eugenia** Rchw. **Uganda Yellow-moustached Bulbul.**

The wings of thirteen adults are: ♂, 75–88; ♀, 70–75 mm.
Budongo, Bugoma, Mubango, Bumasifa, Mt. Elgon.

1062. **Stelgidocichla latirostris saturata** Mearns. **East African Yellow-moustached Bulbul.**

This race is recognisable, being greener above, with the crown like the mantle, not darker, and it is slightly larger. Wings: ♂, 85–94; ♀, 80–88 mm. The young are darker than young in corresponding age of the Uganda race.
Kyambu, Kikuyu, Kenia.

1063. **Stelgidocichla latirostris pallida** Mearns. **Mt. Uaraguess Bulbul.**

I have no specimen from this locality; but as the avifauna in this district is peculiar, it is probably sound.

1064. **Eurillas virens holochlorus** subsp. nov. **Uganda Green Forest Bulbul.**

Larger than typical *virens* and the whole of the underside, with the exception of the middle of the breast, uniform olive-green, the central streak yellow and restricted. Wings: ♀ 70–78, ♂ 80–85 mm., as compared to 55–65 in ♀ *virens* and ♂ 70–76 mm. The young is rusty-olive above, and has the breast and flanks tinged with brownish. This is the darkest race of the *virens* group. In Angola is found a form which is much like the above, but the throat is always paler than the breast. It probably requires naming. Type: ♂, Sezibwa River, Uganda, November 1914. Tring Museum.
Budongo, Bugoma, Lugalambo, Sezibwa (type), Kyetume, Elgon. 13 ♂, 14 ♀.

1065. **Pycnonotus tricolor minor** Heugl. **Uganda Yellow-vented Bulbul.**

P. t. phaeocephalus Mearns.
Typical *P. tricolor tricolor* does not occur in Uganda. I cannot understand Sclater and Praed (*Ibis*, October 1918) stating that *tricolor* is the Uganda form. I have had a series of over forty typical *tricolor* and laid them out with fifty-five specimens of the Uganda race, including typical White Nile birds. The differences were obvious. Uganda birds are darker on the head, throat, and breast than *tricolor*. The wings measure: *P. tricolor*: ♂, 101, 100, 100, 99, 98, 98, 97, 97, 96; ♀, 98, 96, 96, 96, 95, 94, 95, 91, 90 mm. *P. tricolor minor*: ♂, 99, 99, 97, 97, 97, 96, 96, 96, 95, 94, 93; ♀, 94, 93, 92, 92, 92, 92, 91, 90, 90, 90, 90, 88 mm.
West Uganda to White Nile, east to Elgon and Kisumu districts: Masindi, Nimule, Budongo, Bugoma, Sezibwa, Elgon, Kisumu, Kendu Bay.

1066. **Pycnonotus tricolor fayi** Mearns. **East African Yellow-vented Bulbul.**

Pycnonotus tricolor micrus (not Oberholser) van Someren in *Ibis*, 1916.

My series shows that the characters claimed for this race are good. Compared with the Uganda *P. tricolor minor* these birds are larger and darker on the

head and general plumage. Wing: ♂, 102, 102, 101, 100, 99, 98, 98, 98, 97, 95; ♀, 92, 91, 90, 90, 90, 90, 85 mm. The call-note and song are also different.

Nairobi district to Kenia and north to Muhuroni, where it probably grades into *P. t. minor*: Nairobi, Kyambu, Fort Hall, Naivasha, Nakuru, Molo, Burnt Forest, Lumbwa.

1067. **Pycnonotus tricolor micrus** Oberh. **Kilimanjaro Yellow-vented Bulbul.**

This race, which is represented in my collection from Dar-es-Salaam, Tabora, and Dodoma, and in Tring from Zanzibar and Kisaki, has nothing to do with the yellow-vented Bulbul of the Teita Plains, nor with the birds inhabiting the coast at Mombasa inland to Samburu, both of which are forms of *dodsoni*. Wings: ♂, 96, 95; ♀, 90, 90, 92, 92, 93 mm.

1068. **Pycnonotus tricolor pallidus** Roberts.

This form from Portuguese East Africa is represented in my collection by six specimens from Lumbo, North Mozambique. They are like *layardi*, but slightly paler, and have the yellow of the crissum extending on to the abdomen. Wings: ♂, 97, 97, 96, 95; ♀, 87, 90 mm.

1069. **Pycnonotus dodsoni dodsoni** Sharpe. **Little Somali Yellow-vented Bulbul.**

Small typical birds with wings from 80–84 mm. do not range to Kilimanjaro as stated by Sclater and Praed in the *Ibis*, October 1918. In the Ukambani and Teita district is found a larger race with heavier, longer bills and longer wings.

North Marsabit and Juba River.

1070. **Pycnonotus dodsoni teitensis** subsp. nov. **Desert Yellow-vented Bulbul.**

This is a larger race of *dodsoni*, having a more robust appearance and having wings of in ♂ 88, 88, 87, 85, 85, 85, "♀" 81, 91 mm.

These birds have been compared by Oberholser with *peasei*, and he reports them distinct. This corroborates my views. I have therefore named the birds as above. South Ukamba to Kilimanjaro.

Teita, Tsavo (type), M'buyuni, N'ziu River. 6 ♂ 2 ♀. Type: ♂, Tsavo 26.iii.1918. Tring Museum.

1071. **Pycnonotus dodsoni** ? subsp. nov. **Mombasa Yellow-vented Bulbul.**

These birds are certainly also a form of "*dodsoni*," having the mottled breast, white patch on the side of the neck, broad white tips to tail-feathers, and the same note. The wing-measurements are as follows: ♂, 90, 90, 90, 89, 89; ♀, 82, 82, 82, 79 mm. They are thus even larger than *teitensis* and probably another distinct subspecies.

Mombasa along the coast to Malindi and inland to the South Taru country: Mombasa, Changamwe, Mazeras. 5 ♂ 3 ♀ only examined.

I have gone over the African groups of Brown Bulbuls, and I think the following division into four groups the best: (1) The white-vented group: *P. barbatus*

with its subspecies. (2) The yellow-vented group: *P. tricolor* with its races. (3) The wattle-eyed yellow-vented: *P. capensis* and its races; and (4) the mottle-breasted yellow-vented: *P. dodsoni* with its races.

1072. **Zosterops kikuyuensis** Sharpe. **Yellow-fronted Kikuyu Zosterops.**

This is the most beautiful of the East African *Zosterops*, being more intensely coloured and having a wide, deep yellow band on the forehead, and a very big eye-ring. Kenia birds differ slightly and when sufficient material is examined will probably be found distinct. The range of this species is the high forests south-east of the Rift Valley, including the Aberdare Range south to Kikuyu and Nairobi, and possibly Kenia. Wings of twenty skins: 55–63 mm. A forest species.

Kyambu, Kikuyu, Aberdare Mountains, Nairobi.

1073. **Zosterops jacksoni** Neum. **Jackson's White Eye.**

Z. bayeri Lönnberg.

There is no doubt that Lönnberg has re-described typical *Z. jacksoni* under the name *bayeri*. His specimen came from Londiani, practically the type locality of *jacksoni*. He compared it with Elgon birds, but Elgon birds are not true *jacksoni* but a distinct race, which is named afterwards.

Neumann included Elgon in the distribution of *jacksoni*, but the type locality was fixed as *Mau*. *Zosterops jacksoni* is very much like *kikuyuensis*, but not so intensely coloured, and has a paler and narrower frontal band, besides being larger. Eighteen typical specimens have wings of 62–65 mm., mostly males 65 mm. The range of this species is the high forest north-west of the Rift Valley, *i.e.* Sotik, Mau, Ravine, Elgeyu, Nandi, Molo, Londiani, Nyiro, Burnt Forest, Maraquet, Shandi.

1074. **Zosterops yalensis** spec. nov. **Yala White Eye.**

This species is very like *jacksoni*, but smaller, and lacks the green wash on the breast; it has a smaller bill, and the eye-ring is not so extensive, the mantle slightly yellower. Besides my series of 5 ♂ 2 ♀ there are several specimens collected by Allen Turner for Major Meinertzhagen, and now in the Tring Museum. Wings of thirty skins: ♂, 59–62; ♀, 58–60 mm. This species is found in the park country on the Kisumu-Kakamega Road, and in the Kakamega Forest. It does not extend to Elgon.

Yala, Mumias, Nyarondo, Kaimosi. Type: ♂ ad., Kaimosi, Allen Turner leg. Tring Museum.

1075. **Zosterops elgonensis** spec. nov. **Elgon Pale White Eye.**

These birds differ from both *Z. yalensis* and *jacksoni* by being generally paler above and below and having the yellow of the underside decidedly tinged with greenish, except on the throat. This pale form has wings of 60–61 in males, 56–60 mm. in females. The eye-ring is large. Fifteen specimens were taken. It is a forest species. The range of this species is limited to Mt. Elgon, particularly on the Bukedi (Uganda) side, and in the Bumasifa Forest, up to 10,000 feet.

Type: ♂, Bukedi, 13.i.1916. Tring Museum.

1076. **Zosterops stuhlmanni** Rchw. **Uganda White Eye.**

Birds from Central and North-west Uganda do not differ from Sesse Island specimens.

Budongo, Busiro, Lugalambo.

1077. **Zosterops flavilateralis** Rchw. **Coast Pale White Eye.**

These birds differ from Teita specimens and those from Ukambani. Typical birds do not range over the localities mentioned by Reichenow, but are confined to the coast belt.

Witu, Lamu, and Manda.

1078. **Zosterops massaica** spec. nov. **Teita White Eye.**

Somewhat like *flavilateralis*, but richer yellow below and greener above, less yellow, with a darker forehead. Wings from 53–56 in males, 53–55 mm. in females. This form ranges from Teita north to the South Guasso Nyiro Plains, to Loita, but not to the Ukamba and Fort Hall districts. Here we find a paler form, which has been named, by Mearns, *Z. fricki*.

Sagala, Teita, Tsavo, Loita. Type: ♂, Sagala, 8.viii.1918. Tring Museum.

1079. **Zosterops flavilateralis fricki** Mearns. **Pale Scrub White Eye.**

These are pale small birds which are very close to *Z. f. smithi*—Somaliland—but slightly greener above and darker yellow below. They differ from the Teita birds in being generally paler. As the material of *smithi* is too limited I refrain from criticising this form until more material is available. Neumann in his description of *smithi* mentioned a bird collected by Jackson in Ukamba as being intermediate between *smithi* and *flavilateralis*; this specimen belongs to *fricki*. Twenty skins; wings: ♂, 55–56; ♀, 52–55 mm.

Fort Hall, Thika, Nairobi, Simba, Meru.

1080. **Zosterops omoensis** Neum.

This form probably ranges down the west shore of Lake Rudolf, but there are no specimens available for comparison.

1081. **Nectarinia kilimensis** Shell. **Long-tailed Green Sunbird.**

A large series of specimens, though showing considerable variation, cannot be divided into races, but on the whole a greener, less bronzy bird is found in the Kisumu district and North Kavirondo. It would appear that full-plumaged males are to be found in every month of the year. Ankole specimens are purply bronze. I have no typical Kilimanjaro specimens for comparison.

Bugoma, Budongo, Busiro, Ankole, Sezibwa, Kyanja, Kyanuna, Kibingei, Kimiriri, Kisumu, Burnt Forest, Maraquet, Naivasha, Fort Hall, and Nairobi.

1082. **Nectarinia tacazze jacksoni** Neum. **Jackson's Purple Long-tailed Sunbird.**

This race must be recognised, as the southern mountain birds are much more highly coloured than the typical Abyssinian form. It is a common bird at altitudes over 6,500 feet.

Bumasifa, Elgon; Elgeyu, Maraquet, Londiani, Mau, Aberdares.

1083. **Nectarinia tacazze unisplendens** Neum. **Kilimanjaro Purple Long-tailed Sunbird.**

Apparently a mountain form confined to Kilimanjaro.

1084. **Nectarinia famosa famosa** Linn. **Southern Emerald Long-tailed Sunbird.**

Has been recorded from the highlands of the coast, but its occurrence requires verification.

1085. **Nectarinia famosa aeneigularis** Sharpe. **Blue-bellied Emerald Long-tailed Sunbird.**

Nectarinia famosa centralis (Neum. in MSS.) van Someren in *Ibis*, 1916 (!).

It is noticeable that my four Nairobi specimens are larger and have heavier, longer bills than specimens taken at higher ranges from Escarpment, north to Londiani. A larger series may show this to be constant. I cannot find a published description of Neumann's name *centralis*.*

Nairobi, Escarpment, Naivasha, Nakuru, Londiani, Aberdare Mountains.

1086. **Nectarinia pulchella lucidipectus** Hart. **Red-and-yellow-breasted Green Sunbird.**

Nov. Zool. 1921, p. 123.

Ankole, Meuressi, Kobua, Lake Rudolf; also Baringo.

1087. **Nectarinia melanogaster** Fisch. & Rchw. **Black-bellied Sunbird.**

I find that when a series of Kisumu birds are compared with typical birds from Nguruman, the Kavirondo birds are larger, having longer bills and wings of 64–66 mm., compared with 58–60 in typical birds, but, as birds from Loita intergrade, no definite distribution can be assigned to these large birds at present.

Magadi, Loita, Naivasha, Kitui, Kisumu, and Kendu Bay.

1088. **Nectarinia johnstoni** Shell. **Johnston's Crimson-tufted Emerald Sunbird.**

Limited to Mt. Kilimanjaro.

1089. **Nectarinia johnstoni idius** Mearns. **Kenia Crimson-tufted Emerald Sunbird.**

Confined to Mt. Kenia.

1090. **Nectarinia johnstoni dartmouthi** Og.-Grant. **Ruwenzori Crimson-tufted Emerald Sunbird.**

Found only on the heights of Ruwenzori.

1091. **Nectarinia purpureiventris** Rchw. **Rainbow Bird.**

Found in the Kivu district.

* It is always undesirable to write unpublished names on labels, but still more objectionable to quote them in print.—E. H.

1092. **Nectarinia chloronota** Jackson. **Ruwenzori Sunbird.**

Limited to Ruwenzori.

1093. **Drepanorhynchus reichenowi** Fischer. **Golden Sunbird.**

Found on the higher elevations from 4,500 to 9,000 feet.

Nairobi, Naivasha, Nakuru, Burnt Forest, Kisumu, Kibigori, in East Africa; Jinja in Uganda.

1094. **Hedydipna platura karamojoensis** van Som. **Pigmy Long-tailed Green Sunbird.**

Bull. B.O. Club, xl. p. 93, 1920.

This race is very much like *platura*, but is purer, darker green on the head and breast, the type of feathering being like that found in *N. famosa*, i.e. with a frosted appearance. From *H. adiabonensis* Zedlitz it differs in being considerably larger, having wings of 60–61 and bills of 11–12 mm. The females differ from those of *H. platura platura* by being darker above, without the yellowish rump; in being more yellowish below; in lacking a distinct eye-stripe; and in having the whitish tip to the outer rectrices much more restricted. The range of this form appears to be from Soroti, north to Kobua on Lake Rudolf, including the Karamoja country in Turkana. Besides my specimens there are others in the Nairobi Museum.

Mt. Kamalinga, Mt. Moroto, and Soroti in Uganda.

1095. **Hedydipna platura platura** Vieill. **Western Pigmy Long-tailed Green Sunbird.**

Has been obtained in the north-west province of Uganda at Nimule and Gondokoro.

1096. **Hedydipna metallica** Licht. **Somali Pigmy Long-tailed Green Sunbird.**

This form extends from Somaliland to the Northern Frontier districts of East Africa.

1097. **Nectarinia erythrocerca** Hartl. **Red-breasted Wedge-tailed Sunbird.**

I have no typical White Nile birds for comparison, but as I find that Kisumu birds are not quite the same as Western Uganda ones, it is quite likely that they differ also from typical specimens. A series of each should be compared.

Karungu, Kendu Bay, Kisumu, Kano, Kimiriri River, in East Africa; Sezibwa River, Jinja, Entebbe, and Ankole in Uganda.

1098. **Nectarinia nectarinoides** Richm. **Lesser Red-breasted Wedge-tailed Sunbird.**

This very rare species appears to be limited to the dry scrub country, stretching from Ukamba, west to the Nguruman Hills. It is possible that we will eventually have to recognise an intermediate race between this Kilimanjaro species and the small South Somaliland form.

N'ziu River, Simba, Magadi, Tsavo, Taveta, Sagala, in East Africa.

? Nectarinia raineyi Mearns. **Sotik Wedge-tailed Sunbird.**

"*Helionympha raineyi*" was described from Sotik. It is said to be near *erythrocerca*, but very much like *Cinnyris m. suahelica* in coloration. It is probably a long-tailed specimen of *suahelica*. This now brings me to a discussion of the validity of the genus *Helionympha*. I find certain characters which distinguish the birds placed in this genus from the genus *Cinnyris* and *Chalcomitra*; but on examination of large series of so-called *Cinnyris*, I find birds which present features intermediate between the so-called true *Helionympha* and *Cinnyris*. I refer to the *mariquensis* group. I find that the representatives of this species in Kisumu district have markedly graduated central rectrices which in certain specimens project as much as 10 mm. beyond the next pair, and the tail is thus wedge-shaped! (cf. *H. raineyi*). But I also find in the series, examples with very much less graduated central rectrices. In typical *mariquensis* I find the same variation. The birds referred to the genus "*Helionympha*" are undoubtedly connecting links between *Cinnyris* and *Nectarinia*, and as the characters of this genus do not remain true to type but merge into the genus *Cinnyris*, I submit that the *Nectarinia* and *Cinnyris* groups should not be kept separate! It is also doubtful whether *Chalcomitra* should be recognised for the same reasons!

1099. Cinnyris mariquensis suahelicus Rchw. **Large Brown-black-bellied Green Sunbird.**

My large series covers an area from East Uganda south to Kilimanjaro and South Ukambani: I find that ten specimens from Simba and River N'ziu have distinct purplish blue bands separating the green of the throat from the red of the breast. This band, when present, in Kisumu specimens is not purply but green-blue. As I am unable to define the ranges of these forms, I keep them united for the time being.

N'ziu, Kitui, Machakos, Magadi, Loita, South Guasso N'yiro, Naivasha, Kisumu, Kibingei, Kendu Bay, Kibigori; M'Bale and Elgon.

1100. Cinnyris mariquensis osiris Finsch. **Abyssinian Black-bellied Sunbird.**

Cinnyris mariquensis hawkeri Neum.

I am certain that when more specimens are available from the Baringo and Northern Frontier district, they will prove to be distinct. I fail to separate the South Abyssinian birds from the typical North Abyssinian race, with which my Moroto specimens agree very well. This form does not overlap *suahelicus*.

Mt. Moroto, Kerio River, in Uganda; Ravine, Baringo, North Kenia, Orr Valley, N'guasso N'yiro, in East Africa.

1101. Cinnyris chalcomelas Rchw. **Purple-banded Black Sunbird.**

C. shephardi Jackson.

The name *chalcomelas* has priority over *shephardi*, and as both apparently refer to the same bird, this species must be known by Reichenow's name. The wings of my series measure 59–63 mm.

Tana River (A. B. Percival), N'ziu River, Tsavo, Campi-ya-bibi.

1102. **Cinnyris bifasciatus microrhynchus** Shell. **Little Red-banded Black Sunbird.**

The characters of this race are its small size, and the wide maroon-red band which succeeds the purple band of the upper breast. The range appears to be the moist coastal belt, from Lamu south to Dar-es-Salaam and the coast of North Mozambique, and it does not range into the dry thorn-bush country beyond the Taru Desert. The wings of my series are 50–56 mm.

Lamu, Manda, Mombasa, Dar-es-Salaam, and Lumbo.

1103. **Cinnyris bifasciatus tsavoensis** subsp. nov. **Little Purple-banded Dark Sunbird.**

This inland form differs from *microrhynchus* by having a pronounced purple breast-band and a very narrow or faintly indicated maroon line below this band. This form ranges throughout the dry inner thorn-belt as far inland as the Simba Plains, occupying practically the same territory as *C. chalcomelas*, but not extending to the coast. There is not a single adult male in the series which has the maroon breast-band as in typical *microrhynchus*. The wings measure 53–58 mm. Besides my 18 ♂ birds and many females, there are others in Nairobi Museum and private collections in East Africa. The birds occurring in West Uganda and said to be *microrhynchus* should be compared in series.

Teita, Sagala, Maungu, Tsavo, Upper Tana, and Simba. Type: ♂ ad., Tsavo, 3.iv.1918. Tring Museum.

1104. **Cinnyris angolensis** Less. **Green-throated Black Sunbird.**

These birds from West and Central Uganda are very like typical Angolan birds, being dark bronzy brown, but they are slightly larger, though not sufficiently so to warrant separation.

Masindi, Bugoma, Mubendi, and Entebbe.

1105. **Cinnyris angolensis kakamegae** van Som. **Kavirondo Green-throated Black Sunbird.**

Bull. B.O. Club, xli. p. 113, 1921.

A dark race of the Angolan species; bills slightly longer, 21–22; wings 70–72 mm. Females darker above, and more darkly and heavily striped below.

North Kavirondo and Nandi: Yala River, Kaimosi, Kakamegoes, Mandi Escarpment.

1106. **Cinnyris bradshawi** Sharpe. **Violet-rumped Black Sunbird.**

One ♂ from Kyambu (17.v.1918) has purple upper tail-coverts, and possibly belongs to this species. The type locality is Witu near Lamu. Are these birds not reversions to the oldest type, *amethystinus*? So far as I know, only two or three specimens exist.

1107. **Cinnyris kirki** Shelley. **Purple-throated Black Sunbird.**

I find that my highland birds are larger and have longer, stouter bills. Should a series show this to be constant, a highland race should be recognised, as, besides

size, the birds are darker. More material is, however, necessary. Most of my specimens are from the coastal area.

Manda, Witu, Changamwe, Samburu, Sagala, Teita, Bura, Kitui, Simba, Orr Valley (A. B. Percival), Nairobi, Kyambu, Kenia.

1108. **Cinnyris cupreus** Shaw. **Copper Sunbird.**

Budongo, Bugoma, Mubendi, Sezibwa, Elgon, in Uganda; Yala and Kisumu in East Africa.

1109. **Cinnyris superbus** Shaw. **Superb Sunbird.**

Compared with typical birds the Uganda specimens are larger and more purplish about the throat and breast; the females are darker, more greenish, below. Wings: ♂, 80–81; ♀, 73–76 mm.

The races of this Sunbird require working out; there are certainly three distinct forms. Sierra Leone and South Nigerian birds are the smallest and most distinct, having blue throats in the males and yellowish females.

Owing to lack of time I am unable to study these races closer.

Masindi, Budongo, Bugoma, Kyanja, Sezibwa.

1110. **Cinnyris habessinicus turkanae** van Som. **Purple Crowned Black-bellied Sunbird.**

Bull. B.O. Club, xl. p. 94, 1920.

This race differs from the typical bird and from *alter* of Neumann, by being larger, and in having the red breast wider and of a brighter shade; the throat is greener, not inclining to bluish; the mantle and rump and upper tail-coverts golden green, the latter not bluish. The pectoral tufts are richer yellow.

Wings: 66–70 mm., as compared to 60–61.

South Lake Rudolf and Turkana: Turkwell, Kobua.

1111. ? **Cinnyris bouvieri tanganyicae** Og.-Grant. **Orange-tufted Brown-bellied Sunbird.**

5 ♂ 3 ♀ are not typical *bouvieri*, but may possibly be the same as *tanganyicae*, which is known only from the type.

Bugoma, Busiro, Entebbe, Mawakota.

1112. **Cinnyris leucogaster lumbo** van Som. **Large White-bellied Sunbird.**

Bull. B.O. Club, xli. p. 113, 1921.

Differs from the typical South African form by having the rump and upper tail-coverts like the mantle, not so bluish. The throat is less purplish, and it is smaller. Wings: ♂, 53–55; ♀, 51 mm.

North Mozambique and coast of southern Tanganyika Territory. 3 ♂ 1 ♀, July, August, September, and four skins in Nairobi Museum. Type from Lumbo.

1113. **Cinnyris albiventris** Strickl. **Small White-bellied Sunbird.**

I have insufficient material of typical birds for comparison, but specimens available suggest that North Somali birds may not be quite the same as South Kenya Colony ones.

Lamu, Manda, Tana, Taru, Taveta, M'buyuni, and Tsavo.

1114. **Cinnyris venustus blicki** Mearns. **Little Buff-bellied Sunbird.**

3 ♂ 1 ♀ show that this race is perfectly good. It is, however, rather doubtful whether they should be looked upon as intermediate between *venustus* and *albiventris*.

Kerio, Turkwell R., Lake Rudolf.

1115. **Cinnyris venustus igneiventris** Rchw. **Orange-bellied Sunbird.**

Although strictly a West Uganda race, yet typical birds are occasionally found in East Uganda, in territory occupied by *C. v. falkensteini*. The two forms probably interbreed.

Kigezi in South Ankole, Masindi, Bugoma, Budongo, Mubendi, Sezibwa, Entebbe, Elgon.

1116. **Cinnyris venustus falkensteini** Rchw. **Yellow-bellied Sunbird.**

Two specimens from Lumbo and Dar-es-Salaam agree well with specimens from Nyassaland in size and colour, but I am unable to verify this with a series. Much variation exists, some specimens being quite deep orange-yellow on the belly, others chrome-yellow, while two birds from the country of the northern frontier are very pale yellow (not as in *blicki*), and their females are also pale. More material should be collected from this district.

Dar-es-Salaam, Lumbo, Taru, Bura, Kitui, Nairobi, Escarpment, Naivasha, Nakuru, Kyambu, Kisumu, South Elgon, West Elgon, Jinja, and Kyanja.

1117. **Cinnyris chloropygius orphogaster** Rchw. **Little Olive-bellied Sunbird.**

This form is apparently confined to the west and central districts of Uganda, and does not extend into East Africa.

Masindi, Budongo, Bugoma, Mawakota, Mubendi, Kyanja, Mbale.

1118. **Cinnyris mediocris keniensis** Mearns. **Kenia Olive-bellied Sunbird.**

This form occurs in the same territory as *C. reichenowi*. I have no typical *mediocris* for comparison.

Kenia, Nyeri, Enbu (typical *keniensis*), Molo, Elgeyu, Maraquet, Elgon (perhaps slightly different).

1119. **Cinnyris mediocris garguess** Mearns. **Mt. Uraguess Olive-bellied Sunbird.**

This race can be admitted, as the specimens from the type locality show these birds to be paler on the belly and lacking a deep blue breast-band.

Mt. N'yiro and Mt. Uraguess. 2 ♂ 1 ♀. A. B. Percival coll.

1120. **Cinnyris reichenowi reichenowi** Sharpe. **Purple-rumped Olive-bellied Sunbird.**

Occupies the same area as the blue-rumped *C. mediocris*, i.e. Elgon south to Mau.

Ankole and Kivu birds are smaller and have shorter bills, and belong to a recognisable race.

Kagezi, South Ankole, Elgon, in Uganda; Yala River, North Kavirondo, Elgeyu, Maraquet, Molo, in East Africa.

1121. **Cinnyris reichenowi kikuyuensis** Mearns. **Kikuyu Purple-rumped Olive-bellied Sunbird.**

This race can be recognised. The females show more difference and are also smaller.

Kenia to Escarpment: Kenia, Fort Hall, Meru, Uraguess (A. B. Percival).

1122. **Cinnyris regius** Rchw. **Little Yellow-flanked Sunbird.**

This species is fairly common in the South Ankole district and extends up to the Semliki, *i.e.* the West Uganda lake districts.

Kigezi in South Ankole. 5 ♂ 2 ♀.

1123. **Cinnyris hunteri** Shell. **Hunter's Red-breasted Black Sunbird.**

The presence of this species in East Uganda is rather remarkable and extends its range. With sufficient material from this locality, however, it may be shown that Uganda birds are not typical. I find no difference in the males; females may differ.

Meuressi, Turkwell; Samburu, Voi, Bura, M'buyuni, Campi-ya-bibi, Maungu, Tsavo, Tana, and Juba River.

1124. **Cinnyris gutturalis inaestimata** Hart. **East African Purple-shouldered Red-breasted Black Sunbird.**

We must admit this race, as the small size is constant. I cannot find any constant difference in coloration, either in the males or females, between this race and the southern birds. The type locality is Dar-es-Salaam.

Malindi, Mombasa, Changamwe, Masongoleni, and Dar-es-Salaam.

1125. **Cinnyris senegalensis aequatorialis** Rchw. **Uganda Red-breasted Black Sunbird.**

This race is coloured exactly like *acik* of the Sudan, but larger. I find that birds from the Masindi-Nimule district are intermediate and hardly to be distinguished from the northern form. This form does not occur in Uganda Proper —there the race is always larger. The female *aequatorialis* is a dark bird with dark olive underside, quite different from the East African race which has been separated by Mearns.

Masindi, Bugoma, Budongo, Mubendi, Busiro, Mubango, Lugalambo, Kyetume, Jinja, Elgon, in Uganda; Kisumu, Kendu Bay, Kibigori, in East Africa.

1126. **Cinnyris senegalensis atra** Mearns. **East African Scarlet-breasted Sunbird.**

I find on comparing East African examples with Uganda birds that the males are larger, *not smaller* as stated by Mearns, and not any blacker. They have wings of 75–80 mm. I recognise this race not only because of its larger size, but because the females are quite different from Uganda ones; being much less dark on the back and paler greyish, not olive-greenish-yellow below, also more mottled. The range is from the coast to Kilimanjaro and Kenia north to Lumbwa.

Reichenow has described birds from Mosehi (Kilimanjaro) as *lamperti*, giving as their characters the brownish back and wings. I have examined the bird collected by Ansorge and which Reichenow has referred to this new race, and find it to be indistinguishable from worn specimens of *C. s. atra*. I have not sufficient specimens of so-called *lamperti* for comparison, but would suggest that German East African birds in fresh full plumage are not brown backed or have brown wings, but blackish, and thus not distinguishable from the Ukamba birds—in which case the form must, of course, be called *lamperti* and not *atra*. I found this bird at Lamu, along with *G. g. inaestimata*.

Lamu, N'ziu, Kitui, Thika, Fort Hall, Tsavo, Lake Jipe, Nairobi, Nakuru, Kenia (7,000 feet).

1127. Cinnyris cyanolaema subsp. Blue-throated Grey Sunbird.

A comparison of birds belonging to this species from various localities shows that there are certainly three distinct forms. That of (1) Fernando Po ; (2) that from Sierra Leone and South Nigeria ; and (3) the Uganda race. As I have insufficient typical material I refrain from placing my birds with certainty.

Bugoma, Entebbe, Mubango, Kyetume, in Uganda.

1128. Cinnyris verticalis viridisplendens Rchw. Green-backed Grey Sunbird.

I was surprised to find this bird represented in a collection from Mt. Kenia, especially as it does not occur in the Forests of Kikuyu. A comparison of the females may possibly show the Kenia bird to differ.

Bugoma, Budongo, Masindi, Busiro, Mubendi, Entebbe, Kyanja, Lugalambo, Mubango, Sezibwa ; Elgon, Elgeyu, Maraquet, Molo, and Kenia.

1129. Cinnyris alinae Jackson. Ruwenzori Sunbird.

This bird was described from Ruwenzori and is apparently limited to that range and the central lake region. I have obtained it in the Kigezi country in South Ankole.

1130. Cinnyris obscura ragazzi. Uganda Olive Sunbird.

Of the three forms of Olive Sunbird inhabiting East Africa and Uganda, this is the largest, having wings of 57–71 mm. The form extends from West Uganda to Elgon and south along the Nandi Escarpment to Mau and the Sotik and Elgeyu Forests.

Budongo, Bugoma, Mawakota, Buremeze, Sizebwa, Kyetume, Entebbe; South Elgon, Kavirondo, Nandi, Lumbwa, Elgeyu, Maraquet.

1131. Cinnyris obscura neglecta Neum. Kikuyu Olive Sunbird.

This race is perfectly good, being smaller and more olive-yellow below than the Uganda race. The range, so far as I can find out, is from South Ukamba and East Kilimanjaro north to Kenia and the Kikuyu Forests. Wings : 54–63 mm.

Kitui River, N'ziu, Taveta, Kyamba, and Nyeri on Mt. Kenia.

1132. **Cinnyris obscura changamwensis** Mearns. **Coastal Olive Sunbird.**

This is the smallest race of *obscura* and quite distinct. It is greyer below than the Uganda form and much smaller. The wings of my series measure 50–56 mm. It is apparently limited to the coast belt from the Pangani River north to Lamu. North of this, in the Juba district, is found a smaller race with yellow undersurface and wings of 46–53 mm., but as my material is inadequate I have not named the form.

Mombasa, Changamwe, and Juba River. 7 ♂ 3 ♀.

1133. **Cinnyris verreauxi fischeri** Rchw. **East African Grey Sunbird.**

This quite distinct Sunbird does not extend very far inland, but is limited more or less to the coast belt.

Changamwe, Mombasa, Manda, and Lamu Islands.

1134. **Anthreptes longmari ? haussarum** Neum. **Large Purple White-bellied Sunbird.**

I am not satisfied with the identification of these birds, owing to want of material for comparison. As stated in my paper in the *Ibis*, 1916, the birds I reported on then agree with Neumann's *haussarum* from Togoland, of which there is a topo-type in the Rothschild Museum. I find that whereas the majority of specimens have no green whatsoever on the rump, one or two show just a small patch on the sides of the rump; the shoulder-patch is purple, narrowly outlined with greenish. These characters are present in the co-type of *haussarum*. In any case, these birds do not seem to be typical *longmari*. The wings measure: ♂ 76–82, ♀ 65–78 mm.

The females are *yellow-bellied*, while the young have the whole underside washed yellowish. Seth-Smith collected this type of bird on the White Nile at Fatiko, along with typical *orientalis*. I have collected these birds at Masindi, Soroti, Bugoma, Budongo, Busiro, Kyetume, Jinja; North Kavirondo.

1135. **Anthreptes orientalis** Hartl. **Green-rumped Purple White-bellied Sunbird.**

My large series agrees well with typical birds collected near Lado. They are much smaller than the birds mentioned above, and besides having a *large* green band on the rump and a large green shoulder-patch, the females are quite distinct, being paler, greyer above, and pure white below. In view of the fact that these birds and the large form *longmari* occur together throughout Uganda and northern East Africa, we must keep them as distinct species and not as subspecies of the same species. I thus recognise a large species characterised by having yellow-bellied females—the *longmari* or western group, with so many races; and the small species—the *orientalis* or eastern group, with one subspecies, *A. o. neumanni* of South Somaliland, with white-bellied females. Wings: 63–71 mm.

Nimule, Masindi, Soroti, Moroto, Usoga, Meuressi, Turkwell, Kogua, in Uganda; Kerio, Elgon, Suk, Baringo, Marsabit (A. B. Percival coll.), Kitui, Magadi, Tsavo, Simba, Teita, Kibwezi, Maungu, Masongoleni, Campi-ya-bibi, M'buyuni, in East Africa.

1136. **Anthreptes orientalis neumanni** Zedlitz. **South Somali Purple Sunbrid.**

2 ♂ collected by A. B. Percival on the Juba River probably belong to this race, but I have no typical birds for comparison.

1137. **Anthreptes tephrolaema elgonensis** van Som. **Elgon Grey-throated Sunbird.**

Bull. B.O. Club, xli. p. 112, 1921.

With a series in my own and Meinertzhagen's collection we must recognise the Elgon Grey-throated Sunbird as belonging to a new race, distinguished by its larger size, darker grey chin-patch, and the female having a darker, more greyish underside. Wings: ♂, 59–64; ♀, 57–62 mm.

Nandi Escarpment, north to Mt. Elgon and Uganda: Kaimosi (type), Elgon, Yala River, Kakamegoes, Sio River, in East Africa; Mubango and Mabira.

Anthreptes collaris and subspecies.

I find that there are undoubtedly several recognisable races, composed of, (*a*) typical *A. collaris collaris*, South Africa; (*b*) *A. collaris* subsp., Angola, Gaboon, and Camaroon; (*c*) *A. collaris hypodila*, Fernando Po (a large long-billed form); (*d*) *A. collaris* subsp., Liberia, Sierra Leone (small and rich yellow below); (*e*) *A. collaris* subsp., South Nigeria (slightly paler); (*f*) *A. collaris zambesiana* (size as in Angolan birds, but yellower with an olive wash); (*g*) *A. collaris ugandae* van Som. (richer yellow with dark olive wash on flanks and rich yellow pectoral tufts), extending into highlands of East Africa; (*h*) *A. collaris teitensis* van Som. (size slightly small but with clearer paler yellow underside, paler pectoral tufts), ranging from South Ukambani to Teita; and (*j*) *A. collaris elachior*, limited to the coastal belt of the Tanganyika Territory and Kenia Colony north to South Somaliland; (*k*) *A. c. uraguess*, limited to Mt. Uraguess and Marsabit district. Of these races the ones occurring in Uganda and East Africa are the following:—

1138. **Anthreptes collaris elachior** Mearns. **Pale Yellow-bellied Little Sunbird.**

This race is at once distinguished from all others by its small size and very pale yellow underside—especially in the females, which have the throat pale yellow without any olive wash. Wings: ♂, 48–52; ♀, 45–48 mm.

Lamu, Manda, Changamwe, Mombasa, Vanga.

1139. **Anthreptes collaris teitensis** van Som. **Teita Little Yellow-bellied Sunbird.**

This race is much like the above but larger and slightly richer yellow below, females having the throats slightly tinged with olive; from *A. c. zambesiana* it is distinguished by its clearer yellow undersurface. Wings: 52–57 mm.

South Ukambani to Teita and East Kilimanjaro: N'ziu River, Tsavo, Sagala, Teita, Simba.

1140. **Anthreptes collaris uraguess** Mearns. **Northern Little Yellow-bellied Sunbird.**

Only one ♂ topo-type (A. B. Percival's coll.), so I am unable to discuss its value.

Mt. Uraguess, North Frontier.

1141. **Anthreptes collaris ugandae** van Som. **Elgon Little Yellow-bellied Sunbird.**

Bull. B.O. Club, xli. p. 113, 1921.

This race can be recognised by its rich yellow underside, which in the males is washed with dark olive-green on the flanks, and by the more bluish green upperside and throat; and by the females having a dark olive wash on the throat and flanks. The pectoral tufts in the males are rich yellow. This is the darkest race of this group.

Uganda to Kivu, east to Elgon, and south to highlands of East Africa.

(1) Bugoma, Budongo, Entebbe, Lugalambo, Kyetume; (2) Mt. Elgon, south-east and west; (3) Yala, Kakamegoes, Fort Ternan, Elgeyu, Maraquet, Naivasha, Nakuru, Kyambu, Nairobi, Ngong.

1142. **Anthreptes axillaris** Rchw. **Orange-tufted Green Sunbird.**

Wings: 68–72 mm. A common species in the Uganda Forests.

Bugoma, Budongo, Mubango, Lugalambo, Sezibwa, in Uganda.

1143. **Salpornis emini?** **African Tree Creeper.**

This is rather a rare bird; very few specimens have been taken in East Africa. My records show, one Kibingei River, south of Elgon, one in Suk, one in the Elgeyu Escarpment.

1144. **Anthoscopus sharpei** Hart. **Northern Buff Penduline Tit.**

This bird is characterised by having a dark rufous buff underside and a pale buff forehead. Wings: ♂, vary from 57 to 59; ♀, 53–54 mm. I suggest that this should be considered a race of *A. sylviella* Rchw., from North Lake Nyassa, and not united with it, as Neumann suggested. A rare bird.

Kisumu, Kendu Bay, South Guasso N'yiro. 5 ♂ 2 ♀.

1145. **Anthoscopus rothschildi** Neum. **Eastern Buff Penduline Tit.**

This race is distinguished from the preceding by being paler rufous below, but with a darker rufous forehead and eye-stripe. Wings: ♂, 55; ♀, 52 mm.

Simba and Kitui. 3 ♂ 1 ♀.

1146. **Anthoscopus roccatii roccatii** Salvad. **Uganda Green-backed Penduline Tit.**

Not by any means common. Usually seen in pairs.

Entebbe, Sezibwa, Kyetume. 2 ♂ 2 ♀.

1147. **Anthoscopus roccatii taruensis** van Som. **Coast Penduline Tit.**

Bull. B.O. Club, xli. p. 112, 1921.

This bird is smaller and paler below than *roccatii*, and greyer above. The belly is buffy and the forehead whitish buff with a few dusky tips to the feathers. Besides my specimens there is another in Nairobi Museum. Wings: 45–48 mm.

Coast of British East Africa inland to the Taru desert: Changamwe, Samburu. 3 ♂ 1 ♀.

1148. **Anthoscopus musculus** ? subsp. **East African White-breasted Penduline Tit.**

I have examined the type and cotype of *musculus*, and find that they are rather paler below than my birds, less creamy white on the throat and chin, and much less deep buff on the abdomen.

Wings: ♂, 51; ♀, 47 mm.

Turkwell River, Baringo, Magadi, South Guasso N'yiro, Tsavo, Taveta, Campi-ya-bibi, Maungu.

1149. **Parus fringillinus** Rchw. **Large Buff-breasted Tit.**

This rare species was described from the Meru Kilimanjaro Hills. My specimens extend its range considerably.

South Guasso N'yiro, Loita Plains. 5 ♂, also series collected by A. Blayney Percival.

1150. **Parus thruppi barakae** Jacks. **White-cheeked Tit.**

This race can be admitted, as I find on comparing this series with North Somaliland specimens that the latter are not so clear whitish below, but more greyish. The white collar is found in both races. The wing-measurements are alike—that is, the extremes are the same, though averages are slightly different.

Simba, N'ziu, Olgerei, Lodermoru, Baringo, Campi-ya-bibi, Tsavo, M'buyuni, Masongoleni, Maungu.

1151. **Parus thruppi fricki** Mearns (?). **Kenia White-cheeked Tit.**

Two birds collected by A. B. Percival ought to belong to this race, but I doubt its validity.

North Guasso N'yiro.

1152. **Parus niger insignis** Cab. **Greenish-black Tit.**

This race enters Uganda in the south-western district.

Kagera, Kazinja Channel, in South Ankole.

[*Parus niger leucomelas* does *not* occur—the birds found in Uganda are larger and more purple-black, and I have separated them as *purpurascens*.]

1153. **Parus niger purpurascens** van Som. **Uganda Black Tit.**

Bull. B.O. Club, xli. p. 112, 1921.

A comparison between Uganda and Abyssinian birds shows that they differ as indicated above. Wings: ♂, 83–85; ♀, 78–82 mm.; bills also larger.

Entebbe (type), Bukedi, Mubendi, Soronko on Mt. Elgon.

1154. **Parus niger lacuum** Neum. **South Abyssinian Black Tit.**

Neumann gives his measurements as 83–95 mm. My birds range from 83–91 mm. This large race apparently extends down the line of Lake Rudolf into the North Kavirondo country, where it has been taken by Mr. Turner for Meinertzhagen and myself on three separate occasions. Although not agreeing in wing-measurement exactly with the Omo River birds, it seems to me unnecessary to recognise another race, though they are distinct from the Uganda birds.

Kakamegoes, Kerio, Kibingei, and Kimiriri Rivers, Komolo in Turkwell.

1155. **Parus funereus nigricinereus** Jackson. **Grey-black Tit.**

I have no typical *funereus* to compare, so I am unable to discuss the value of this race.

Sezibwa, Elgon, and Mubango in Uganda.

1156. **Parus albiventris** Shell. **White-bellied Tit.**

I am of opinion that when a series of coast birds is available they will prove to be a smaller race. I find that my two coast males have wings of 75–77, while the up-country males run from 83 to 86, average 85 mm., while the females are 72 mm., compared to 80–82 in up-country birds.

Large birds: Elgon, Nadi, Maraquet, Naivasha, Nakuru, Nairobi, Kyambu, in East Africa; Moroto and West Elgon in Uganda.

Small birds: Sagala, Samburu.

1157. **Parus fasciiventris** Rchw.

Type locality, Ruwenzori.

1158. **Parus griseiventris** Rchw.

Type locality, Kakoma.

1159. **Parus pallidiventris** Rchw.

Type locality, Kakoma.

Of these three species I have no specimens.

1160. **Parisoma böhmi** Rchw. **Black-collared Tit Warbler.**

I am certain that the Somali birds will have to be recognised as a race of this species. If birds in fresh condition are compared, it will be noticed that Somali birds are not so pure grey above and the breast-band is less distinct and not so black, due to the fact that the feathers forming the band are greyer black and have pale tips.

Samburu, Masongoleni, Campi-ya-bibi, Sultan Hamud, Simba, Olgerei.

1161. **Parisoma jacksoni** Sharpe. **Brown Tit Warbler.**

This species is common on the edges of the forests in the highlands. Specimens from Mt. Kenia should be compared with typical birds.

Elgon, Nandi, Burnt Forest, Elgeyu, Maraquet, Lumbwa, Molo, Mt. Kenia.

1162. **Parisoma plumbeum** ? subsp. nov. **Uganda Grey Tit Warbler.**

My five specimens of the Uganda Tit Warbler are much greyer on the breast than typical birds, and it is probable that when a sufficient series from these localities are compared the Uganda birds will prove to be distinct.

Kyanja, Budongo, Sezibwa, in Uganda.

1163. **Parisoma plumbeum orientale** Rchw. & Neum. **East African Grey Tit Warbler.**

This race is quite good, being considerably darker above and below and possessing white under tail-coverts, but its range is not definitely known.

Sagala, Teita, Tsavo, and N'ziu River in Ukamba.

1164. **Melocichla mentalis orientalis** Sharpe. **East African Moustached Warbler.**

This race is perfectly recognisable, being very much richer below and darker above than the one found in Uganda west of the Elgon district. Wings: ♂, 78–81; ♀, 74–79 mm.

These dark birds range from the coast throughout East Africa up to the Elgon district, where they meet and breed with *amauroura*, producing at the line of junction birds which agree with both races, though birds from Kisumu are all pale.

Sagala, Teita, Fort Hall, Nyarondo, North Kavirondo, Elgon, and Mbale in Uganda.

1165. **Melocichla mentalis amauroura** Pelz. **Uganda Great Moustached Warbler.**

M. m. atricauda Rchw.

This form ranges throughout Uganda and extends along the lake shore in the Kisumu district. Wings: ♂, 75–82; ♀, 75–78 mm.

Masindi, Bugoma, Nambigirwa, Entebbe, Kyanja, Jinja, in Uganda; and Ksiumu and Kibigori in East Africa.

GENUS CISTICOLA.

In endeavouring to identify the Grass Warblers, I have made use of the series in Tring Museum, which had been named some time ago by W. Sclater. In some cases I have had to disagree with his views, because my large material does not support his opinions. During my collecting I have endeavoured to make an ornithological survey from the coast through to West Uganda, and the results, so far as the *Cisticola* are concerned, have been most interesting, because I have been enabled to work out the ranges of the various forms inhabiting the country (East Africa particularly).

The first group I shall deal with is the *terrestris* group.

It will be noticed that my division of the group is not based on insufficient material—in fact the forms are obviously recognisable.

First of all, I should like to emphasise the fact that over a considerable area of the country under review we get both *C. terrestris* forms and *C. cisticola* forms, birds which at first glance somewhat resemble one another, but are distinguished by the formation and markings on the tail. The *terrestris* forms always have a shorter tail (even in off season plumage), without a well-marked, clear black subterminal band.

1166. **Cisticola terrestris hindei** Sharpe. **Athi Little Grass Warbler.**

The birds which I have referred to this race are characterised by their pale brownish tone of plumage, which in the non-breeding season becomes lighter, but never greyish ! The males in breeding dress have the top of the head uniform pale brownish, the uniformly coloured feathers not extending beyond the crown, in many cases being limited to the frontal patch. In this race, as in the two other East African forms, the mouths of the males become jet-black in the breeding season !

This type of bird ranges in the plains south of Nairobi to as far south as Simba and Sultan Hamud on the railway, to Magadi on the west, and North Ukamba plains on the east.

North Athi River, Kitui, Machakos, Nairobi plains.

North of this area is found a form which is certainly not *C. t. hindei*; this I name :

1167. **Cisticola terrestris nakuruensis** subsp. nov. **Nakuru Little Grass Warbler.**

These birds are more richly coloured than the preceding, more brownish above and sandy below, with the feathers of the rump more brownish. In the series the differences are readily seen. In breeding condition the males have the top of the head uniform brownish rather darker than in *hindei*, and the uniform feathers extend to the nape. This form is found in the higher plain country from Limuro through Escarpment to Naivasha and Nakuru and in the Solai district and Sotik. Type : ♂, Nakuru plains, 16.v.1918, crown uniform. In Tring Museum.

Escarpment, Naivasha, Nakuru, and South Kavirondo specimens.

When we come to the high plateau of the regions from 7,800 to 10,000 feet, we find a very well marked form, which, being without a name, I have called :

1168. **Cisticola terrestris mauensis** subsp. nov. **Alpine Little Grass Warbler.**

This is a very dark race, having the mantle very deep brownish and the rump decidedly rufescent, while the whole undersurface is deep sandy ochraceous. The rich colouring is noticeable in the field—in fact, when the birds are flushed they appear very like *C. troglodytes ferruginea*.

So far as is known, this form is confined to the high altitudes; thus we find

it on the high belt of the Mau and Elgeyu, and again on Kenia and Aberdare Mountains.

Mau, Molo, Elgeyu, and Mt. Kenia, 8,000 feet. Nine specimens. Type: ♂, Mau, 18.i.1917. Tring Museum.

1169. **Cisticola terrestris ugandae** Rchw. **Uganda Little Grass Warbler.**

? *C. brunnescens* Heugl.

This is a rufous form very much like the Nakuru one, but having a more rufous rump, while the underside is pale, not sandy as in the alpine race. It comes close to *C. t. eximia*, if it is not identical with it. It ranges from West Uganda to Kisumu and North Kavirondo, but does not occur in the Karamoja and Turkana country. In the last-mentioned districts is found a pale bird of which I have only two specimens. They are somewhat like *C. aridula*.

Mawakota, Entebbe, Buziteranjovu, in Uganda. Four skins.

The next bird to be considered is a very pale somewhat greyish bird which is found in the northern districts of the Yatta plains, South-east Ukambani, and in the dry thorn-bush to the Taru desert. These birds appear to be referable to the Somaliland bird:

1170. **Cisticola lavandulae** Grant. **Grey-backed Small Grass Warbler.**

It appears to me somewhat doubtful whether these birds should be considered as a subspecies of *terrestris*, because in the field their form and habits are rather dissimilar. This being so, I prefer to keep them apart. None of my birds have uniform heads.

Kitui, Simba, Tsavo, M'buyuni, Taru, and Lower Tana River. Nine specimens.

Of the *Cisticola cisticola* group there is probably more than one race inhabiting Uganda and East Africa. In my small series I find brownish birds, and others grey on the back, but all with clear, well-defined subterminal black bars on the tail. The tails in all are long.

I provisionally place these birds under:

1171. **Cisticola cisticola uropygialis. Little Barred-tail Grass Warbler.**

The localities from which these birds were taken cover a large area. There is a somewhat marked difference between breeding and non-breeding plumages.

Simba, Naivasha, Karungu, in East Africa; Bumbere Island in Lake Victoria Nyanza; Bugoma and Kobua River, West Lake Rudolf, in Uganda. Seven skins.

1172. **Cisticola nana** Fisch. & Rchw. **Little Brown-headed Grass Warbler.**

This well-marked species is found in the plains from Ukamba, south to the Taru and Teita. It is somewhat like a *Prinia* in habits. I find no evidence of plumage change indicating the breeding conditions. Young birds are browner on the back than adults, and have yellower breasts. Judging from the limited material of the Somali form which has been named *dodsoni*, I am of the opinion that this race is good, being much purer grey on the mantle. There are no such birds in my series of twenty typical *C. nana*.

Maungu, Campi-ya-bibi, Tsavo, Makindo, M'buyuni, Machakos, and Magadi.

1173. Cisticola angusticauda Rchw. **Little Long-tailed Brown-headed Grass Warbler.**

C. simplicissima Neum.
C. mülleri Alex.

This bird, which might at first glance be taken for *C. nana*, is readily distinguished by its much longer, more graduated tail, and the almost uniform back. They do not occupy the same territory, *angusticauda* coming into the East African area, only in the Kisii and South Kavirondo districts.

Kendu Bay, Victoria Nyanza. 2 ♂ 1 ♀.

1174. Cisticola troglodytes ferruginea Heugl. **Little Brown Grass Warbler.**

This race is quite good, being darker above and more rufous below, than typical form. It is not common, and apparently does not extend farther south than the northern territory of Uganda, Turkana, and South Lake Rudolf to Suk.

Mt. Kamalinga in Turkana, Uganda ; and Suk in East Africa. 2 ♂.

1175. Cisticola calamoherpe Rchw. **East African Little Mottled-back Grass Warbler.**

Described from west of Kilimanjaro, this species ranges through Ukamba, going north as far as Elgon. I do not think that the Abyssinian birds are the same, but my material from this district is very small. It is also possible that with more material from the highlands of 7,000 feet and over, we shall have to admit a paler, larger race. My few birds taken on the Mau appear to suggest this. Young birds are like adults, but more rufescent above and yellower below. My material comes from South Loita, Kitui, N'ziu River, Nairobi, Ruiru River, Machakos, Fort Hall, Naivasha, Nakuru, Mau, Kibigori, and Kisumu. Thirty-seven specimens.

1176. Cisticola rufa subsp. **Ankole Little Brown-backed Grass Warbler.**

Two males shot at Ankole in April and November seem to belong to a recognisable race of *rufa*, the distribution of which is from Ankole south to Lake Kivu and the chain of lakes to North Tanganyika. From typical birds they differ in being more rufous on the back and crown. The series in Tring corroborates this. The form of *rufa* occurring in Angola is even more distinct !

1177. Cisticola rufa hypoxantha Hartl. **Uganda Little Brown-headed Warbler.**

This race, which is quite distinct, ranges from Lake Albert east to Elgon and North Kavirondo. I do not think it comes farther east or south. There appears to be a plain-backed plumage and a mottled plumage, the former being the breeding dress. In the latter plumage the mottlings, though not numerous, are large and clear. The rufous coloration to the edges of the primaries and outer secondaries is present in both plumages.

Masindi, Entebbe, Lugalambo, Kyetume, in Uganda; Soronko River, Elgon, Yala River, and Kisumu in East Africa. Eleven specimens.

1178. **Cisticola reichenowi** Mearns. **Coastal Little Grass Warbler.**

Ten topo-typical specimens. First described as a form of *hypoxantha*. My series and the distribution suggest that these birds should be kept as a distinct species. They are somewhat like *C. rufa*, but are larger and have less rufous on the wing. The range is limited to the coast belt and the dry thorn-bush of the Taru and Teita. In habits they resemble the rest of the small Grass Warblers.

Mombasa, Changamwe, Samburu, Sagala, Teita, Taru.

(I have carefully gone into this group, usually looked upon as several subspecies of *subruficapilla* = *cheniana* (cf. Sclater & Praed, *Ibis*, 1918), but the species *subruficapilla* is apparently quite distinct and does not occur in East Africa. In East Africa we find three forms of this group inhabiting distinct areas and not overlapping, i.e. *C. fischeri*, *aequatorialis*, and *semifasciata*. I am not absolutely certain that they are all subspecies of *cheniana* (*subruficapilla* auct.), but they all have the following features: Top of head brownish, mantle ashy brown, distinctly mottled with dark shaft streaks; undersurfaces whitish to buff, greyish on flanks. Fairly long tails, 60–70 mm., and slender bills. Tarsus 30 mm. or under. Tail with black band and greyish tips.)

1179. **Cisticola fischeri** Rchw. **Kavirondo Scrub Warbler.**

This form, apparently described from a bird in immature plumage, ranges in the region of the south shore of Lake Victoria as far south as the line of the Mau-Elgeyu Hills and North Sotik and in northern Tanganyika Territory. This bird in its full breeding dress is brown umber on the head; greyish brown on the mantle with distinct dark centres to the feathers. Underside buffy white, paler on the throat and abdomen and greyer on the flanks. The non-breeding plumage is slightly lighter in colour, but not so well marked as in the *natalensis* (*strangei*) group. It is noticeable that females are more sandy below than males. Young birds are paler brown above and much more distinctly streaked.

The wing-measurements of my series give the following: Wings: ♀, 55; ♂, 68–70 mm.

Sio River in North Kavirondo; Kisumu, Kano, Karungu, Kisii, Bumbere Island in Victoria Nyanza; Amala River. 23 ♂ 8 ♀.

1180. **Cisticola aequatorialis** Mearns. **Naivasha Scrub Warbler.**

This bird is very much like the above and differs in the darker brownish tinge to the mantle, which is distinctly mottled. It is also slightly larger and has a longer tail when in full plumage. Wings: ♀, 55–60; ♂, 68–72 mm.

The range appears to be from South Sotik through the North Loita Plains to Nakuru and Naivasha Lakes to the north end of the Aberdare Range (not on high mountains) through the Kikuyu country to Fort Hall district: South Mau, North Loita, Sotik, Nakuru, Naivasha, Escarpment, Nairobi, Kikuyu. 12 ♂, 3 ♀, 1 juv.

1181. **Cisticola semifasciata** Rchw. **Southern Brown-headed Scrub Warbler.**

Somewhat like the race inhabiting the Kisumu district, but altogether paler and with a paler, more brightly rufescent crown, especially on the nape. The

crown is more distinctly streaked. It is perfectly distinct from *aequatorialis*. This form ranges throughout the dry belt of East Africa, including the South Ukamba district through the district of Simba, across to Magadi and South Loita to the plains east of Kilimanjaro, and thence to the Teita and Taru districts to the middle Tana. No seasonal plumages are apparent.

South Loita, Narossera (A. B. Percival), Olgerei, Magadi, Simba, N'ziu, Tsavo, Campi-ya-bibi, M'buyuni, Lake Jipe, Bura, Maungu, Masongoleni, Kibwezi, Makindu. 25 ♂ 11 ♀.

1182. **Cisticola cinereola schillingsi** Rchw. **Streaky Grey Scrub Warbler.**

This is a larger, rather paler race of *cinereola* (? = *somalica*) which inhabits the same area as *C. semifasciata*, except that it apparently extends farther northeast and reaches the Lower Juba River and Kismayu. Two birds from this district anyhow agree better with *schillingsi* than with *cinereola*. The general characters are: Head coloured like mantle, pale whitish grey, with pronounced brownish streaks. Undersurface whitish, tinged sandy on the flanks.

Magadi, Simba, Tsavo, M'buyuni, Campi-ya-bibi, Taru; Kismayu on Lower Juba (A. B. Percival coll.). 11 ♂ 3 ♀.

1183. **Cisticola cantans** Heugl.

Two males shot 19.ii.1911 appear to belong to this species.

Marsabit North.

1184. **Cisticola** spec. ?

2 ♂, shot 22.xi.1917, are somewhat like ♀ "*subrufica pilla fischeri*," but differ from that bird by having the pale tips to the tail-feathers pure white, not ashy or brownish buff. When the birds fly, this character is most conspicuous. They do not agree with any birds in Tring Museum.

Mt. Kamalinga, Karamoja, Uganda.

(The next group is that of the birds known hitherto as "*strangei*" and "*natalensis*." Both belong to the one species, i.e. *natalensis*. These birds are readily recognised by their comparatively short, stout, strong, curved bills and their generally compact build. Seasonal plumages differ.)

1185. **Cisticola natalensis pachyrhynchus** Heugl. **Uganda Heavy-billed Scrub Warbler.**

Cisticola strangei van Someren (nec Fraser !), *Ibis*, 1916, and auct.

These are the birds which have been called *strangei*, but as *strangei* is distinct and, as Sclater has pointed out, a race of "*natalensis*," the next name available for the Uganda birds is *pachyrhynchus*. I thus do not agree with Sclater, who (on the Tring labels) united all the East African and Uganda birds under the name *kapitensis* of Mearns. The Uganda birds are quite different from the East African ones, and there is a big break separating their respective ranges. In full breeding plumage this bird is greyish above—with dark centres to the feathers of the crown and mantle—but appears also to have a brown non-breeding dress, as occasionally such specimens are found. But an examination of the material above and in Tring Museum (over sixty skins) reveals only four such birds. Are we

to presume that seasonal (that is breeding and non-breeding—not "summer and winter"—as the birds breed twice a year!) plumages are the exception in the Uganda race of *natalensis*? I find no intermediate birds, and, what is of great importance, grey-backed birds are found throughout the year! In this connection I would draw attention to a paper on the nesting of Uganda birds in the *Journal of the East African and Uganda Natural History Society*, No. 15, 1920, January, p. 477. It will be seen that for *C. strangei* or *pachyrhynchus* the nesting seasons are April, May, and June, and again in December. If there were any regular and consistent periods during which the birds moulted from grey to brown, surely my present series and that reported on in *Ibis*, July 1916, p. 451, would contain more brown birds during the months of, say, February and August! Again, I would draw attention to the fact that *brown* (*not grey*) *birds* were captured on March 3rd, December 3rd, and May 1st! They are not young birds! One is led to suggest that on the whole there is no definite seasonal plumage change! The range is from the shores of Lake Albert throughout western Uganda to South Ankole and passing east to the shores of Lake Rudolf, extending into East Africa in the Kavirondo country, but not farther south than the line of the northern foothills of the Elgeyu—Mau Escarpment. South of this there is a large tract where I have not taken or seen any of these heavy-billed birds.

South Ankole, Masindi, Mubendi, Entebbe, Chagwe, Kyetume, Lugalambo, Jinja, Soronko River, West Elgon, in Uganda; Kimiriri, North Kavirondo, Kisumu, Kibigori, Fort Ternan, and N'zoia River. 15 ♂ 14 ♀.

1186. **Cisticola natalensis kapitensis** Mearns. **Kapiti Heavy-bill Scrub Warbler.**

I am not sure that these birds should not be kept as a species! In general tone they are rather different from the *natalensis* group in both types of plumage. They are much more streaky in the non-breeding plumage, and always have the nape and neck rather brownish—in fact, some birds in the non-breeding dress superficially resemble worn *C. robusta ambigua*. However, as the general build and the type of bill are that of the *natalensis* group, we must for the time being keep the bird as a subspecies. The type of call and song and other habits are, however, different. A seasonal change is fairly well marked, which is another difference. The range, so far as I have observed, is from the plains of South Kenia through Fort Hall and Ukamba to Kapiti and south of South Guasso N'yiro, south to the thorn-bush belt north of Makindu.

Fort Hall, Kitui, Machakos, and N'ziu River and Simba. 9 ♂, 5 ♀, 2 juv.

1187. **Cisticola alleni** Mearns.

Described from Mt. Kenia. I have no specimen.

1188. **Cisticola heterophrys** Oberh. **Coast Brown-capped Scrub Warbler.**

? *C. soror* Rchw. 1916.

This bird was described from Mombasa and most of my specimens are topotypical. I have placed *soror* as a synonym provisionally, but it is doubtful. These birds are somewhat like *rufopileata*, but have the mantle slightly mottled.

The range appears to be the coast belt of East Africa to almost the Ruvuma and inland to the South Kilimanjaro Plains.

Mombasa, Pangani, Changamwe, Lamu, Manda Islands. 14 ♂, 7 ♀, 1 juv. compared.

(Typical *lugubris* (*erythrogenys* is a synonym) has two plumages—a grey-backed and a sandy pale one (*vide Rüpp. Vög. N. O. Afr. T.* 11 and 12). Both birds came from the same locality !)

1189. Cisticola lugubris marginata Heugl. Nile Brown-winged Swamp Warbler.

2 ♂, shot 20.xi.1917, undoubtedly belong to this northern race and not to *nyanzae* Neum. They are much like the coastal form *haematocephala*. They are pale on the back and have olive-grey-brown heads. This race ranges through the Nile Province east to the Turkana and Lake Rudolf country.

Mt. Kamalinga in Karamoja, Moroto, Turkwell, in Uganda.

1190. Cisticola lugubris haematocephala Cab. Coastal Brown-winged Swamp Warbler.

? *C. l. suahelica* Neum.

I have taken this race next as it is most like the preceding, but can be easily distinguished. It is quite a different-looking bird from *C. l. nyanzae*, being paler on the back and always having a pale olive head, not brown. The eggs of *haematocephala* are much more boldly marked. This race inhabits the coast belt of British East Africa from Kismayu to Pangani and extends inland to about the line of Samburu; interior to this we find birds indistinguishable from the lake race, i.e. *nyanzae*. Seasonal plumages not marked.

Juba River, Kismayu, Witu, Lamu, Manda, Changamwe, Mombasa, Samburu. 10 ♂ 6 ♀ compared.

1191. Cisticola lugubris nyanzae Neum. East African Brown-winged Swamp Warbler.

The majority of brown-backed birds occur in August, September, October, and November, yet grey-backed birds also occur in these months. Glancing at my records of nesting-times I find that this bird is breeding freely in April, May, and June and at the end of November and December—that is, these birds ought then to be in the grey-backed plumage, but both grey and brown are found in the months of November and December. How is one to account for this seeming irregularity, and how many times in the year does one single individual bird moult ? I think it must moult four times ! A suggestion has been made that the birds which breed in the long rains (March, April, May, and June) do not breed again in the short rains (November), and vice versa. This may be correct.

The range of *nyanzae* appears to be from the shores of Lake Victoria south to the Ukamba district and Loita. Whether this race and *haematocephala* actually meet, I have been unable to prove.

Budu, Kampala, Entebbe, Jinja, in Uganda ; Kisumu, Kibigori, Nakuru, Naivasha, Kikuyu, Nairobi, Machakos, Kitui, Simba, and Makindu in British East Africa. 15 grey-backed ♂, 9 brown-backed ♂, 6 moulting from grey to brown or from brown to grey, 32 ♀, 5 juv.

1192. **Cisticola carruthersi** Og.-Grant. **Slender-billed Chestnut-capped Warbler.**

A pair of birds, shot 14.iii.1919, resembles somewhat *C. l. nyanzae*, but can be readily distinguished by their much darker grey backs and deep chestnut crowns and long slender bills. Further, there is no bright red-brown edges to the primaries and secondaries, but instead these parts are dull brownish.

The type of this species came from Mokia, near Ruwenzori, while my specimens come from the Sezibwa River, in Chagwe, Uganda. It is a swamp-loving species and very shy. I have compared the type of *Carruthersi*, which agrees absolutely.

1193. **Cisticola carruthersi kavirondensis** subsp. nov. **Kisumu Slender-billed Chestnut-capped Warbler.**

These are the birds which I doubtfully referred to *C. lugubris* in the *Ibis*, 1916. I have since been able to observe, though not to capture, two other pairs of this bird in the dense papyrus swamps at Kisumu. They resembled the specimens procured in 1912 absolutely. These birds are very much like *carruthersi*, but differ from the latter by being slightly paler on the mantle, with a paler brown crown, the brown colour merging into the grey of the mantle. The wings are also paler. The tail is blackish, with the feathers tipped greyish except the central pair, and the black subterminal band is only just indicated. The bill is long and slender, but not so long as in *C. carruthersi*. It is larger than *carruthersi*.

East shore of Victoria Nyanzae at the Kavirondo Gulf: Kisumu Bay. 2 ♂ 1 ♀. Type: ♂, Kisumu Swamp, 2.vii.1912, in the Tring Museum.

1194. **Cisticola tinniens oreophila** subsp. nov. **Red-headed Mountain Warbler.**

This race of the South African bird is recognisable by its blacker upperside with narrower buff lines to the mantle, its paler, uniform yellow-brown head and the white or cream, not greyish, white edges and tips to the tail-feathers. In the brownish non-breeding plumage this bird assumes a striped head. It is a mountain bird and does not occur in the low country.

The range is Mt. Kenia, along the Aberdare Mountains to the Mau and Elgeyu Escarpments, and Elgon.

Kenia, Aberdare Mountains, Mau, Molo, Elgeyu, Elgon. Type: ♂, Kenia, 12.ii.1919, 7,000 feet. Tring Museum. 6 ♂, 4 ♀, 2 juv.

1195. **Cisticola** spec. ? **Slender-billed Mountain Warbler.**

1 ♂, shot 20.viii.1917, resembles somewhat *C. robusta* in general appearance and size, having the head and nape striped to the mantle, but is at once distinguished by its very slender bill and its more grey-tinged underside. The tips to the tail-feathers are greyish, not white.

Aberdare Mountains.

1196. **Cisticola robusta nuchalis** Rchw. **Uganda Rufous-capped Grass Warbler.**

I find on measuring up a series of thirty skins the wings of the males range from 64 to 66, in females from 55 to 60 mm. In the field I have always recognised

the Uganda bird as being smaller in build than the East African race, and the note is slightly different. The East African bird, *C. r. ambigua* Sharpe (Mau), has been united with *nuchalis*, but I do not agree with this, as a comparison of the wing-measurements and field-notes show the difference.

I believe the range of this bird to be (within the territory dealt with in this paper) West Uganda from Ankole through to the east of Elgon. I am not able to say whether this race and *ambigua* meet, but they may do so in the Elgon-Nandi district. My Elgon birds appear intermediate in size.

South Ankole, Toro, Mubendi, Mubombo. 10 ♂, 3 ♀, 3 juv.

1197. **Cisticola robusta ambigua** Sharpe. **East African Rufous-capped Grass Warbler.**

With my big series of 38 ♂ 30 ♀ before me I can easily appreciate the distinctness of this race, though it is merely one of size and the largest birds are found on the high plateau round Mau, Nakuru, Naivasha. Wings measure: ♂, 68–72 (average 70); ♀, 58–65 mm. This I consider ample to warrant the upholding of this race. There is practically no seasonal variation.

The range of this form is from the grass lands of South Ukamba and the Loita Plains to North Kavirondo and Elgon.

Simba, Magadi, Kitui, Thika, Fort Hall, Nyeri, Kenia, Kikuyu, Nairobi, Naivasha, Nakuru, Mau, Londiani, Eldoret, Elgeyu, Baringo, Kisumu, Kimiriri River, Elgon.

1198. **Cisticola robusta tana** Mearns. **Pale Rufous-headed Grass Warbler.**

This race, described from one specimen, appears doubtful, as I have specimens from the Upper Tana which do not differ from Mau birds!

1199. **Cisticola hunteri** Shell. **Long-tailed Warbler.**

C. kilimensis Mearns.

I have examined typical specimens, and am unable to recognise two races of *hunteri* on Mt. Kilimanjaro, therefore *kilimensis* Mearns is probably the same, as it comes from the same locality. *C. prinioides* Stone, 1905 (nec Neumann!), is also the same as *hunteri*.

1200. **Cisticola hunteri prinioides** Neum. **Mau Long-tailed Warbler.**

C. h. harrisoni Stone.

A darker race than *hunteri* from Kilimanjaro, but not so dark as *neumanni* Hart., and possesses distinct dark centres to the feathers of the mantle. The underside is greyish with the throat whitish, which colour extends to the breast and belly. The white of the throat is not sharply defined from the grey of the breast. I find, however, two darker birds—more like the type of *neumanni*, but they are not adult! The young are brownish above, with distinct streaks to the mantle, while the underside is creamy with a grey tinge on breast and flanks (cf. young of Elgon birds); the brown edgings to the wing-feathers are paler than in adults. In my series I find the wings: ♂, 60–63; ♀, 56–58 mm. To this race I refer specimens collected by Doherty at the Escarpment and others shot at Nairobi, Kikuyu, Molo, Londiani, Mau (type locality), Maraquet Escarpment (lower slopes), Nakuru, Olbolorset, Naivasha, Elgeyu, and Eldoret.

I have twenty-one specimens and there are in Tring fifteen from Escarpment. I also find that the series represents birds taken in every month of the year. They are all uniform, except the two birds referred to before.

This bird ranges in altitudes of 5,000 to 8,000 feet along the Rift Valley: Loita, Kikuyu, Kabete, Nakuru, Molo, Mau, Londiani, Burnt Forest, Maraquet. Twenty-two specimens.

1201. **Cisticola hunteri neumanni** Hart. **Kenia Long-tailed Warbler.**

C. wambuguensis Mearns.

I have examined the type of *neumanni* and consider it to be a young bird; it has a brown bill, not black as is found in adults. It is slightly more rufous on the back than my topo-types—but this, too, is in keeping with its immature state. When the series is laid out with *prinioides*, the darker appearance of *neumanni* can, however, be appreciated. I have in my series birds from the type locality of *wambuguensis* Mearns, and cannot separate them from the Kenia specimens; further, my birds from the Aberdare Highlands do not differ from Kenia ones, and there cannot be a pale form between two dark ones of the same race. My series shows wings of 57–67 mm. Worn birds are hardly to be distinguished from fresh typical *prinioides*.

Mearns's description of *wambuguensis* fits exactly immature *neumanni* in second plumage! Seasonal plumages do not appear to differ.

Mt. Kenia, Nyeri Road, Aberdare Highlands. 9 ♂ 3 ♀ collected.

1202. **Cisticola hunteri immaculata** subsp. nov. **Elgon Long-tailed Warbler.**

Elgon birds do not agree with any of the described races, and on referring to Jackson's specimens taken on Elgon I find that Sharpe (*Ibis*, 1892) already remarked on the dark grey undersurface. This is most pronounced in my specimens, but they are also much darker on the mantle than any other specimens and show no mottling or streaks. Further, the young of corresponding age to young *prinioides* have the underside grey, not creamy, with only a greyish tinge. Further specimens will no doubt show this to be a good form.

Mt. Elgon, 9,000 feet. 2 ♂, 2 ♀, 1 juv. Type: ♂ ad., Bumasifa, Mt. Elgon, 24.iii.1916, in the Tring Museum.

1203. **Cisticola lateralis ugandensis** subsp. nov. **Uganda White-bellied Brown Warbler.**

These birds are usually referred to as *lateralis*, but differ markedly from the latter by being much browner on the mantle, at all seasons. The wings measure 62–68 mm.

Type in my collection.

Uganda-Congo border east to Mt. Elgon and South Ankole: South Ankole, Mubendi, Bugoma, Masindi, Entebbe, Chagwe, Jinja, Busoga. 10 ♂ 4 ♀.

1204. **Cisticola chubbi** Sharpe. **Large Pale Brown-headed Warbler.**

This species does not alter much throughout its range in Uganda, though Ankole and Kivu birds are somewhat darker on the mantle and darker brown on the crown.

North Kavirondo to West Uganda and Kivu: Yala, Kavirondo, Elgon, Lukiga, Kigezi, Ankole. 6 ♂, 6 ♀, 1 juv.

1205. **Cisticola rufopileata emini** Rchw. **Emin's Brown-backed Warbler.**

It would appear that this bird does not get a jet-black bill like *C. l. ugandensis*. The paler brown back and more rufous head, together with the colour of the bill, help to distinguish these birds. The range appears to be the whole of the Uganda territory, including Elgon: Budongo, Bugoma, Masindi, Entebbe. Jinja, Mubendi, Elgon.

1206. **Cisticola pictipennis** Madarasz. **East African Chestnut-capped Warbler.**

I have before me an excellent series of birds, including, besides my own enumerated above, the material in Tring. I am compelled to suggest that all the birds from East Africa hitherto called *cinerascens* are *pictipennis* of Madarasz.

I do this for the following reasons: *C. cinerascens* of Heuglin is synonymous with *semitorques*, according to all recent workers. Now, typical *semitorques* is a bird with a distinct supercilium, as given in the original description, while all the birds called *cinerascens* from East Africa have no superciliary stripe. This being so, the next name available is *pictipennis*. Madarasz compared them with *rufipileata*, and states that they are greyer on the back, and have the bands on the tail much more clearly defined and darker, which is a fact in East African birds! Comparison with typical *rufipileata* confirms this. If it is shown later that *cinerascens* is not the same as *semitorques*, still *pictipennis* will probably have to be used for the East African birds, as *cinerascens* came from Keren, Bogosland, and is most certain to be different from southern birds. With regard to the birds named *pictipennis* by Bannerman (*Ibis*, 1911), and those so named by Og.-Grant (*Ibis*, 1908, p. 295), I have examined these birds, and they are really immature *pictipennis* (*cinerascens* of Authors). The grey forehead and very wide black tail-bar is found in immature *pictipennis*.

The birds referred to by Grant would belong to the Uganda form of *pictipennis*, which appears to be *C. belli* Grant, described from Ruwenzori.

1206a. **Cisticola pictipennis ? belli** Og.-Grant.

A ♂ from Jinja in Usoga is unlike E. African specimens, the back being darker grey, the head deeper chestnut, the edges to the primaries darker, and the underside has sandy buff. This bird is matched by two specimens collected by Ansorge at Masindi in Uganda and referred to as *cinerascens* by Hartert. They somewhat resemble *rufopileata* from Angola, Gaboon, Nigeria, etc.

1206b. **Cisticola teitensis** spec. nov. **Teita Red-headed Warbler.**

A ♂ from Sagala, Teita, at first glance resembles *C. ruficapilla* of S. Africa, being similarly coloured underneath and above, and having a distinct wide superciliary stripe. Head chestnut-brown, the brown extending to the mantle, which is generally tinged with brownish. It differs markedly in the tail not being long and graduated, but short and rounded, and has distinct wide black bars and pale grey tips (not whitish as in *pictipennis*!). It is also a larger bird.

1207. **Cisticola erythrops** subsp. **East African Rufous-bellied Swamp Warbler.**

Sclater and Praed have studied this group and have recognised three races of typical *erythrops*. Unfortunately their researches did not go far enough.

The two new forms they create are obviously distinct, but I think they have overlooked Reichenow's prior name for the Abyssinian form. No mention is made of the East African and Uganda race, but I find this to be quite distinct from the West African species (Nigeria). It is always more olive-washed on the mantle, never being grey in this area. It resembles *zwaiensis* = *pyrrhomitra* Rchw., but has the forepart of the head paler, more yellowish brown, less rufous, this colour not extending on to the fore part of the crown. The crown is coloured like the mantle. My series is very uniform, with the exception of three youngish birds, which are rather more olive than normal. Young in first plumage are quite brownish olive on the head and mantle, have a distinct white loral spot, and a grey ring round the eye.

Uganda birds cannot be separated from East African ones.

Masindi, Toro, South Ankole, Bugoma, Budongo, Busiro, Kasala, Mawakota, Lugalambo, in Uganda; Kavirondo, Kirimiri, South Elgon, Kakamegoes, Kisumu, Burnt Forest, Kenia, Embu, Nairobi, Kyambu, in East Africa.

1208. **Heliolais erythroptera kavirondensis** subsp. nov. **Red-winged Pintail Warbler.**

Apparently near *major* of Blundell and Lovat, and as rich on the underside. The type of *major* is a pale worn specimen. It is quite different from typical *erythroptera*. The East African birds differ from *major* in being less rufous on the mantle, more greyish, and the rump more olive. The tail is much darker brown, without rufous tinge. Bill brown, not black. A rare bird.

♂, 27.viii.1918. Fort Ternan in Kavirondo. Other specimens in Nairobi Museum.

1209. **Prinia mistacea immutabilis** van Som. **East African Wren Warbler.**

Bull. B.O. Club, xl. p. 93, 1920.

In the provisional revision of this group by Selater and Praed (*Ibis*, 1918, pp. 676–7), omission has been made of certain well-marked forms. Under the heading *P. m. tenella* Cab. (Mombasa) we find the distribution given as East Africa and Uganda to Belgian Congo. My series of birds from the coast, north to West Uganda, shows that there are two birds within this distribution; the coastal bird is *tenella* Cab., the inland one differs. I therefore named it *immutabilis*. In addition, the bird from the Mufumbiro, Kivu, and North Tanganyika districts is *Prinia mistacea graueri* Hart. (NOV. ZOOL. 1920, p. 457). *P. m. immutabilis* differs from *P. m. mistacea* in having the mantle and lower back olive-brownish, with the head slightly darker and greyer tinged, the rump more brownish, the outer webs of the primaries and secondaries only slightly edged with brownish. It differs from the coastal form (*tenella* Cab.) in being darker above, and lacking the large white preorbital spot and mottled appearance which *tenella* has in fresh full plumage. It is also a larger bird, having wings of ♂ 51–55, ♀ 49–51 mm.

The call-notes are different. There is no seasonal change. This type of bird ranges from Ukambani and Loita through the highlands of East Africa to Elgon and Uganda. Besides my specimens, there is a series in Tring.

Simba, Kitui, N'ziu River, Embu, Fort Hall, Kyambu, Nairobi, Nakuru, Naivasha, Samburu, Kibos, Kisumu, in East Africa; Jinja, Lugalambo, Kyetume, Entebbe, Mubendi, Bugoma, Toro, Chambura, Masindi, in Uganda.

1210. **Prinia mistacea tenella** Cab. **Coastal Wren Warbler.**

This coastal race is paler below and above than up-country birds.

There is no seasonal change in plumage. Wings: 45–58 mm. The range appears to be limited to the coast belt and the birds do not penetrate inland to any distance. I have found it from Vanga, north to the Juba River, including the Islands of Lamu and Manda.

Mombasa, Changamwe, Lamu, Manda, Witu, Juba River.

1211. **Prinia somalica intermedia** Jacks. **Pale Wren Warbler.**

I was surprised to find this bird in the Serengeti Plains east of Kilimanjaro, and then again in the region of the Turkwell River, west of Lake Rudolf. I can see no difference between these birds, nor can I find any character for separating them from *P. s. erlangeri* from South Somaliland (N'gare-lewin), of which, however, I have only seen one specimen. If the two are not separable, then the name *erlangeri* must be used, as it has priority. The range would be from East Kilimanjaro Plains to South Ukambani, north to the Guasso N'yiro and Baringo district, also to Lake Rudolf and Turkana.

Tsavo, Campi-ya-bibi, Meuressi, Turkwell River.

1212. **Prinia leucopogon reichenowi** Hartl. **Uganda White-throated Wren Warbler.**

P. ugandae.

Very distinct and ranges through Uganda from west to east, extending into East Africa in the North Kavirondo country.

South Ankole, Toro, Bugoma, Budongo, Masindi, Buzivanjovo, Entebbe, Lugalambo, Sezibwa, Kyetume, Elgon, in Uganda; Kaimosi in East Africa. 16 ♂ 8 ♀.

1213. **Prinia bairdi melanops** Rchw. **East African Barred Wren Warbler.**

Young birds are brownish above, grey-brown below, with whitish abdomen, barred slightly at the flanks; secondaries tipped with rusty brown. Bill horn-brown. This bird does not appear to range into Uganda, but is limited to Elgon, south to the Nandi and Elgeyu Escarpments to Mau and Sotik. Here, again, we have a race of a western bird which appears cut off from its nearest neighbour, *P. b. obscura*, by the whole width of Uganda and northern Tanganyika Territory. (See introductory remarks.)

Elgon, Kaimosi, Mau, Elgeyu Ravine, Molo.

1214. **Prinia bairdi obscura** Neum. **Kivu Barred Wren Warbler.**

Darker than the Elgon bird.

South Ankole to Kivu and North Tanganyika.

1215. **Dryodromas rufifrons rufidorsalis** Sharpe. **Rufous-backed Wren Warbler.**

D. r. reichenowi Mad.

Full-plumaged males are much more rufous on the back than the nearest form, *smithi*, of which *erlangeri* is a synonym. Females and young birds are not so rufous, and very much like males of *smithi*. Full-plumaged males have a

series of black spots on the upper breast, forming a broken collar. In females this is almost absent. The range is apparently the dry thorn-bush country from Teita to Sotik and Ukamba.

Maungu, Voi, Campi-ya-bibi, M'buyuni; Tsavo, Magadi, Simba.

1216. **Dryodromas rufifrons smithi** Sharpe.

Has been recorded from the Lorian and Juba River districts.

1217. **Dryodromas rufifrons turkana** van Som. **Uganda Rufous-faced Wren Warbler.**

Bull. B.O. Club, xl. p. 93, 1920.

Very much paler above than *smithi* and *rufidorsalis*, with the rufous of the forehead not extending beyond the middle of the crown. From *rufifrons* it differs in the greater amount of rufous on the head and more white on the outer webs of the primaries and secondaries. This white edging is not so conspicuous as in *rufidorsalis*.

Country west of Lake Rudolf: Kobua River, Meuressi, Turkwell River.

1218. **Apalis pulchra** Sharpe. **East African Black-collared Forest Warbler.**

This really beautiful species is fairly plentiful near Elgon, and has a fairly wide range. It occurs along the line of forest-clad highlands from Elgon to Kikuyu and Kenia. Young birds differ in being duller and having the throat tinged with yellowish; the bill is horny brown, not black. The eggs of this bird have been taken for me by J. Pemberton Cook at Kyambu; they are rather elongated, of a pale greenish blue, with liver-coloured spots.

Elgon, Kibingei River, Kakamegoes, Nyarondo, Elgeyu, Maraquet, Molo, Nairobi, Kikuyu, Kyambu, Kenia.

1219. **Apalis ruwenzorii** Jacks. **Ruwenzori Collared Forest Warbler.**

These birds from a country between that of typical *ruwenzorii* and *catiodes*, are also intermediate in plumage. They are darker than *ruwenzorii* on the chin, breast, and flanks, but not quite so dark as *catiodes*. A larger series is required to see if any definite distribution can be defined for so-coloured birds. I have only 1 ♂ 1 ♀ from Kigezi in South Ankole.

1220. **Apalis nigriceps collaris** van Som. **Uganda Black-capped Forest Warbler.**

Bull. B.O. Club, 1915.

2 ♂ 2 ♀ agree absolutely with the birds mentioned in *Ibis*, 1916, and endorse the characters claimed for this race.

Mubendi, Entebbe, Mabira.

1221. **Apalis jacksoni** Sharpe. **Jackson's Yellow-breasted Forest Warbler.**

Kikuyu specimens do not differ from Elgon ones; on the other hand, Kivu birds have blacker heads. A series from North Tanganyika will probably show this to be constant.

I have also two birds from Toro which are very much richer yellow below

than typical Elgon birds, and more like two females from Angola (*Ibis*, July 1916, p. 458 pl.). A series should be collected and compared. They probably agree with the Congo race, but I have no specimens for comparison.

Elgon (1), Kikuyu (4), Maraquet (3), Nyarondo (2).

1222. **Apalis binotata** Rchw. **White-bellied Green Forest Warbler.**

The appearance of this bird on Mt. Elgon is surprising. From Camaroon I have insufficient material. A slight difference is, however, noticeable in the specimens available, but I cannot say if this is constant.

2 ♂, 17.iii.1915. Mt. Elgon.

1223. **Apalis personata** Sharpe. **Black-headed White-bellied Green Warbler.**

Ruwenzori, south to Kivu.

1224. **Apalis porphyrolaema** Rchw. **Chestnut-throated Grey Warbler.**

The range appears to be the forests from Elgon south to Elgeyu and Sotik, and south to the Aberdares and Kenia.

Elgon, Bumasifa, in Uganda; Burnt Forest, Maraquet, Aberdare Mts., Kenia.

1225. **Apalis porphyrolaema affinis** Og.-Grant. **Ruwenzori Chestnut-throated Grey Warbler.**

Described from Ruwenzori. Requires confirmation.

1226. **Apalis rufigularis denti** Og.-Grant. **Brown-throated Forest Warbler.**

Some of my specimens come very near to the typical bird. The range of this subspecies would be from Ruwenzori east to Mt. Elgon.

Bugoma, Budongo, Mubango, Sezibwa, Mabira, and Lugalambo in Uganda.

1227. **Apalis flavocincta** Sharpe. **Long-tailed Yellow-banded Warbler.**

I collected a series of 21 ♂, 16 ♀, 3 juv. at all times of the year, because I was certain that there were two groups of these birds in East Africa. My suspicions have been justified, and I have accordingly arranged my specimens under two headings. I keep *flavocincta* Sharpe specifically distinct from the short-tailed group, *flavida*. The characters of *flavocincta* are: Size large (in comparison); mantle and wings dark yellowish olive-green, the grey of the head seldom reaching to the nape, head always dark grey, not pale grey. Tail long and graduated, with the outer pair entirely pale matt yellow, or just dark at the base, the next pair yellow for the terminal third, rest tipped with yellow. Breast-band pale yellow, and in the males washed with greenish olive on the sides (cf. next group). Young birds are paler on the underside and have a distinct greyish white loral spot and whitish eyelids. Perhaps Sharpe had a youngish bird when he described this species. The range is from the south of Elgon throughout East Africa, not including the southern coast belt.

Maraquet, Nakuru, Naivasha, Kyambu, Nairobi, Fort Hall, Athi, Kitui, N'zin River, Tsavo (M'buyuni, Campi-ya-bibi, Maungu, the last rather smaller).

1228. **Apalis "flavida" neumanni** Zedl.

Three skins collected on the Juba River by A. Blayney Percival. This appears a doubtful form!

1229. **Apalis flavida golzi** Fisch. & Rchw. **Short-tailed Yellow-banded Warbler.**

Although this bird has been united with *flavocincta*, I am of opinion that it is different. I find that we get a bird which ranges through Central and Southern German East and extends along the southern coast belt of East Africa, presenting the following characters, as compared with *flavocincta*: Crown of head entirely pale grey, not merging into the brighter yellow-green of the mantle. A deeper, brighter yellow breast-band; paler underside; short green tail which is tipped yellow. Two birds collected by Buchanan at Kissaki and Kirengwe agree with my Tanganyika Territory specimens and with my South Mombasa bird.

I have no birds from Arusha for comparison, but have no hesitation in keeping this form distinct from *flavocincta*.

Mombasa, Dar-es-Salaam, Dodoma, Morogoro.

1230. **Apalis flavida aequatorialis** Neum.

This race resembles *golzi* in having the entire crown light grey, but the breast-band is of a deeper yellow. The tail is greenish, short, and with small yellow tips.

This bird ranges along the north-west and southern shores of Victoria Nyanza and to the Kivu district.

South Ankole, Entebbe.

Two specimens in my collection from Lumbo, Portuguese East Africa, are *A. f. neglecta*.

1231. **Euprinodes nigrescens** Jacks. **Black-backed Forest Warbler.**

West Uganda to Elgon; Bugoma, Budongo, and Mubango in Uganda.

1232. **Euprinodes cinerea** Sharpe. **Brown-headed Grey Forest Warbler.**

Four specimens have the crown greyish brown, the forehead pale grey, and the rest have the crown brownish. These differences are not limited to birds from particular localities. The range is from Bukedi in Uganda, south to the forests of North Ukambani: Bukedi, Elgon, in Uganda; Kaimosi, Burnt Forest, Maraquet, Elgeyu, Molo, Nairobi, in East Africa.

1233. **Euprinodes karamojae** van Som. **White-winged Grey Warbler.**

Journ. E. Afr. and Uganda Nat. Hist. Soc. No. 16, 1921.

1 ♂, shot 12.xi.1919, agrees with no described species. Head, mantle, rump, and upper tail-coverts ashy grey. Ear-coverts darker, pre-orbital spot blackish; white streak from the nostrils to above anterior angle of eye. Under-surface entirely buffy white, thighs mottled blackish, wings dark blackish brown, with the four inner secondaries widely edged with pure white on the outer web. Central pair of tail-feathers entirely black, next pair tipped with white, third

pair white for the terminal half, except along the inner web and shaft; fourth pair, terminal half white; outer pair entirely white, except at the base.

Mt. Kamalinga, Karamoja, in Uganda.

1234. **Phyllolais pulchella** Cretzschm. **Little Buff-bellied Warbler.**

Southern birds are rather darker on the back than northern, but the material for comparison is not in good condition for safe judgment.

Mt. Moroto in Uganda; Kerio River, South Lake Rudolf, Kisumu, Kibigori, Kendu Bay, Burnt Forest, Simba.

1235. **Drymocichla incana** Hartl. **Nile Brown-winged Grey Warbler.**

Has been taken at Masindi and in the Nile Province in Uganda.

1236. **Eremomela elegans elgonensis** van Som. **Elgon Golden-breasted Scrub Warbler.**

Bull. B.O. Club, xl. p. 92, February 1920.

This distinct race is nearest to *E. e. canescens* Antin., but differs by being larger and very much richer yellow underneath, a darker and purer grey head, and blacker ear-coverts. It thus differs from both the other forms, *elegans elegans* and *elegans abyssinica*. Wings: 57–61, as compared to 50–56 in *canescens*. The young bird is paler below with the crown coloured as the mantle, *i.e.* greyish green.

The range of this new form is from the north of Elgon to North Kavirondo and south along the Nandi Escarpment to the Burnt Forest.

Kibingei and Kimiriri Rivers, Kibos, Soronko River, Elgon, Kibigori, Kaimosi, Nyarondo, Burnt Forest.

(**Eremomela elegans canescens** Antin. **Nile Yellow-bellied Scrub Warbler.**

Described from the Djur River, this form probably ranges to the north of the Nile Province in Uganda.)

1237. **Eremomela scotops occipitalis** Rchw. **Pale Yellow-breasted Scrub Warbler.**

This form is purer grey on the back, less tinged with yellowish green. The yellow green of the head is brighter. Young birds are much paler than adults, and have the head and mantle of the same colour; the underside is not so yellowish buff.

The range appears to be from the scrub south of Kenia, through North Ukambani to the Kedong Valley.

Nairobi, Kyambu.

1238. **Eremomela citriniceps** Rchw. **Yellow-headed Scrub Warbler.**

Head yellowish green, sharply defined from the grey of the mantle, black loral spot clear and well marked.

The range appears to be the Western Loita district to the Amala country, along the south coast of Victoria Nyanza. It ranges into the South Ankole district along the Kagera River.

Kendu Bay by Kisumu.

1239. **Eremomela badiceps turneri** van Som. **Elgon Brown-crowned Scrub Warbler.**

Bull. B.O. Club, xl. p. 92, February 1920.

This new form is quite distinct from *badiceps* of West Africa. It is smaller and darker, more sooty grey on the hind half of the crown, mantle, wings, and tail. The chestnut of the head is limited to the forehead and front of the crown, the brown colour being extended back as superciliary stripes. The black chest-band is not so wide or extensive. Wing 49, bill 4, tarsus 14 mm.

Only known from the North Kavirondo district: Yala River, south of Elgon.

(The next group of Scrub Warblers is rather difficult. I find two birds, *griseoflava* and *flavicrissalis*, hitherto supposed to be forms of one species, *flaviventris*, inhabiting the same country. This being the case, I must keep them specifically distinct, each with so many races. There are birds in which the yellow is very limited and pale, others in which it is deeper and extends on to the lower chest or so—with the material at my disposal I am unable to arrive at a definite classification.)

1240. **Eremomela flavicrissalis** Sharpe. **Little Yellow-vented Scrub Warbler.**

These birds occur along with *griseoflava*. They do not agree in measurements with Sclater and Praed's remarks in *Ibis*, October 1919, p. 674. They state that *flavicrissalis* is easily distinguished by its small size, wings under 50 mm. My three birds have wings of 48, 50, 54 mm. The largest bird is from the North Guasso N'yiro; the smallest from the Turkwell River. These birds are adult, and have the yellow on the underside very pale and limited to the area round the vent.

The range would be from Eastern Uganda, through the dry country north of Baringo, south to the Northern Guasso N'yiro and Marsabit, probably to the east of Ukambani, east to Tana and Jubaland.

Northern Guassa N'yiro, Meuressi, Turkwell.

1241. **Eremomela flaviventris griseoflava** Heugl. **Northern Little Yellow-bellied Scrub Warbler.**

These birds are undoubtedly distinct from *abdominalis* Rchw. The yellow of the abdomen is paler and the upperside not so clear grey.

East Uganda, Turkana country, and Lake Rudolf, ? Nile Province, Uganda.

Mt. Moroto, Meuressi, Turkwell.

1242. **Eremomela flaviventris abdominalis** Rchw. **Kikuyu Little Yellow-bellied Scrub Warbler.**

These birds have rich yellow abdomen, and my series is very constant in this respect. Young birds have the abdomen slightly paler and the yellow extending to the breast. The range is through the Ukamba country west to Kilimanjaro and into Tanganyika Territory.

Fort Hall, Simba, Tsavo, Sagala, Campi-ya-bibi, Maungu.

1243. **Eremomela flaviventris crawfurdi** Steph. Clarke. **Little Pale-bellied Scrub Warbler.**

This race has a dark sooty-grey back with pale lemon-yellow abdomen, and the sides of the breast are tinged with greyish. The yellow of the abdomen is more restricted than in *abdominalis*. It is large, with wings 57–62 mm.

Range appears to be from Sotik south to the South Loita Plains, and possibly South Guasso N'yiro.

Loita, Sotik (A. B. Percival coll.).

1244. **Sylvietta virens barakae** Sharpe. **Brown-throated Crombec.**

This is a good race which ranges from the Toro country to Ankole and east to Elgon.

Mubendi, Entebbe, Jinja, in Uganda.

1245. **Sylvietta leucophrys leucophrys** Sharpe. **Elgon Brown-headed Crombec.**

Mearns has separated the Kenia birds, but my single Aberdare bird does not differ from Elgon specimens. Forest-clad highlands from Elgon to Aberdares and Escarpment.

Elgon, Kaimosi, Elgeyu, Burnt Forest.

(**Sylvietta leucophrys keniensis** Mearns. **Kenia Brown-headed Crombec.**

I have not seen Kenia specimens.)

1246. **Sylvietta leucophrys chloronota** Hart. **Kivu Brown-headed Crombec.**

Nov. Zool. 1920, p. 460.

This is a good form, being greener on the mantle, rump, and flanks, darker, purer chestnut-brown on the head.

South Ankole to Kivu and North Tanganyika.

(**Sylvietta denti** Og.-Grant. **Brown-headed Crombec.**

Described from Ruwenzori and apparently limited to that range.)

1247. **Sylvietta brachyura dilutior** Rchw. **Uganda Grey and Brown Crombec.**

These birds vary somewhat in the intensity of the brown lower surface. I have two which do not differ in colour from typical *jacksoni*. The smaller size and the grey eye-stripe, of course, distinguish them. One bird from Masindi is very pale and cannot be distinguished from *S. b. nilotica*!

Soronko River, Mt. Elgon, Masindi, Mabira, Kaimosi.

1248. **Sylvietta brachyura leucopsis** Rchw. **Little White-bellied Crombec.**

S. b. tavetensis Mearns.

The material in the Tring Museum does not bear out the distribution of this form given by Sclater and Praed, *Ibis*, October 1919. The South Ethiopian birds are not the same as those from East Africa, nor do the West Rudolf ones agree. *S. tavetensis* is the same as *leucopsis*.

The range is the scrub and thorn-bush country from East Kilimanjaro to Loita, east to Ukambani and Northern Frontier to South Juba.

Tsavo, Maungu, Voi, Taveta, Northern Guasso N'yiro (A. B. Percival coll.).

1249. **Sylvietta brachyura** near **leucopsis.**

3 ♂ 1 ♀ resemble *leucopsis* in having a white chin and abdomen, but differ from that race by being less pure grey above, more tinged with sandy and slightly larger. They are intermediate between *leucopsis* and *nilotica*!

Meuressi, Turkwell, Kobua River, West Rudolf.

1250. **Sylvietta minima** Grant. **Manda Green-rumped Crombec.**

Uniform grey-backed birds occur along with the green-rumped type on Manda and Lamu!

1251. **Sylvietta isabellina macrorhyncha** van Som. **Long-billed Pale Crombec.**

Bull. B.O. Club, xl. p. 92, 1920.

A large pale bird with white undersurface with the flanks markedly sandy rufous, contrasting with the rest of the underside. The bill is very long, as in *S. rufescens*, but more slender. Wings: 58–63 mm.

Yatta and Serengiti Plains, Teita, and E. Kilimanjaro: M'buyuni, Tsavo.

1252. **Sylvietta whytii jacksoni** Sharpe. **Jackson's Brown-bellied Crombec.**

S. distinguenda Mad.

Specimens from north and south of the type locality have a rich rufous buff underside, slightly paler on the abdomen, but not always so.

Specimens from Southern Abyssinia and from west of Lake Rudolf are paler than typical birds. My material from these localities is, however, small (3 ♂ 1 ♀ only), but I prefer to recognise *abayensis* of Mearns for the time being.

The brighter coloured form I have from Kenia, Nairobi, Kikuyu, Olgerei (A. B. Percival), Loita, Naivasha, Nakuru, Burnt Forest, Fort Ternan, Kibos, Kibigori, Kisumu, Kendu Bay; also from Elgon, Entebbe, and Mubendi.

The paler birds from Meuressi, Turkwell, Kibos River, Mt. Moroto, and Kacheliba in Turkana.

1253. **Sylvietta whytii loringi** Mearns. **Pale Brown-bellied Crombec.**

I am prepared to support this race as a pale form of *S. w. jacksoni*, and give as its range the East Ukambani district from south of Fort Hall, extending to the east of Kilimanjaro—*i.e.* inhabiting the whole of the thorn-bush and scrub country and the Yatta Plains.

Fort Hall, Simba, N'zui River, Tsavo, Voi, Taveta, and Campi-ya-bibi.

1254. **Sylvietta whytii fischeri** Rchw. **Coastal Pale-bellied Crombec.**

I do not consider this to be the same as *S. whytii whytii* Shell. It is a paler bird which, within the coastal belt, remains true to type, but which, when it extends inland, merges into the form *loringi* Mearns. My series of fifty skins shows this beautifully. In the Teita and South Ukamba district we find the intermediates (cf. *Camaroptera pileata*, etc.).

Females are more buffy below than males.

S. w. fischeri differs more from *whytii* than *loringi* from *jacksoni*.

Typical birds: Mombasa, Changamwe, Malindi, Lamu, Manda, Samburu, Juba (South). Intermediates: Maungu, Taveta, Teita.

1255. **Camaroptera toroensis** Jacks. **Toro Green-winged Warbler.**

Ranges from West Uganda to Mt. Elgon and North Kavirondo: Bugoma, Budongo, Mubango, Lugalambo, Mabira, Elgon, in Uganda; Kaimosi in East Africa.

1256. **Camaroptera superciliaris ugandae** Steph. Clarke. **Bare-throated Forest Warbler.**

? *C. pulchra* Zedlitz.

In 1916 (*Ibis*, July 1916) I drew attention to the whiter undersides of my specimens as compared to *pulchra*, but my new material shows that this is not constant, some birds being quite creamy below, just as in *pulchra* of Zedlitz. Colonel Clarke does not compare his birds with *pulchra* (1911). If not different, this form must be called *pulchra*!

Mabira, Bugoma, Budongo, South Ankole, Sezibwa River.

(The next group of this genus to be considered is that embracing the various forms of *brevicaudata* Cretzm. = *griseoviridis* of Zedlitz. I am of the opinion that *brevicaudata* is not founded on a specimen of the *superciliaris* group, but on a young of the brown-headed group!)

1257. **Camaroptera brevicaudata** near **abessinica** Zedl. **Turkana Green-winged Warbler.**

These birds are nearest to *abessinica* in coloration, but differ in size, having longer bills. They differ from the race of Uganda Proper in having the head browner, mantle and rump browner, not greyish. A series is necessary before these birds can be satisfactorily determined.

Mt. Moroto, Kobua, Meuressi, Turkana, West Rudolf.

1258. **Camaroptera brevicaudata** subsp. **Green-winged Warbler.**

My large series from Uganda and northern Kenya Colony are darker on the head than the Turkana birds and greyer on the back. The fully adult in the East African birds has the whole of the underside grey, while the young has the belly paler grey, more like the adult males from West Uganda. Both the Uganda and East African birds differ from *C. b. tincta* in having the head and mantle less dark. In seeking to name these birds I looked up the original description and type locality of *griseigula* Sharpe, the name which has been applied to all the East African birds. That bird came from Voi, and apparently so differed from the specimen taken up-country, which Sharpe called *griseoviridis*, that he considered it separable, and proposed for it the name *griseigula*. But is the Voi bird (and those from south of this locality) really different from Kikuyu and Mau specimens? My series from these southern areas do not agree with up-country birds; they are almost intermediate between the pale white-bellied coast bird and the dark grey-bellied highland race. These intermediate birds have the throat and breast greyish, with the abdomen white, very little greyer on the flanks; the crown brownish, and the back greyish. They appear never to get the entirely grey underside of the highland form.

1259. **Camaroptera brevicaudata griseigula** Sharpe. **Teita Green-winged Warbler.**

South Ankole, Budongo, Gugo-na, Mawakota, Busiro, Sezibwa, Entebbe, Kyetume, Elgon, Kenia, Fort Hall, Kyambu, Nairobi, Naivasha, Nakuru, Molo, Londiani.

C. b. griseigula: Voi, Bura, Teita, Maungu, Taveta, N'ziu River (Mt. Nyiru). N. Guasso N'yiro, Marsabit (A. B. Percival).

1260. **Camaroptera brevicaudata pileata** Rchw. **Coastal Green-winged Warbler.**

These birds have the head and mantle pale ash-grey ; the underside whitish in the Mombasa birds, and creamy in the more northern ones from Lamu and Manda. *C. pileata* is described as very similar to *brachyura*, which bird has a green tail, but the East African birds have it greyish brown.

Mombasa, Changamwe, Manda, and Lamu.

1261. **Calamonastes simplex** Rchw. **Sooty Scrub Warbler.**

My big series is made up of birds from a very large area, which I might refer to as the South Juba, West Rudolf, and East Kilimanjaro districts. I can find no difference in birds from these areas, except in the case of the birds from Turkwell and Suk, which are smaller.

I find in the series birds which are uniform greyish on the underside with practically no indications of darker barring. They are not young! Young birds are uniform brownish grey above and below, with no barring on the breast, but a little on the flanks.

Magadi, Simba, Tsavo, Voi, M'buyuni, Campi-ya-bibi, Maungu, Masongoleni, Samburu ; Lower Juba River ; Meuressi, Turkwell, and Suk.

1262. **Calamonastes undosus** Rchw. **Loita Grey Scrub Warbler.**

One specimen collected by A. B. Percival at Narok, Loita, has the grey of the breast more sharply demarked from the pale underside and the bars on the lower parts more clear-cut than in typical birds. The under tail-coverts are buffy banded with grey-brown, not pure white (*vide* Rchw. *Vög. Afr.*, vol. iii.).

1263. **Eminia lepida lepida** Hartl. **Grey-capped Swamp Warbler.**

Besides my material of twelve skins and seven in Nairobi Museum, I have compared the specimens in Tring, and come to the conclusion that, so far as East Africa and Uganda are concerned, the typical bird ranges from South Ankole to Masindi, east to Elgon and south along the Nandi Escarpment to Mau and Sotik. Specimens within this range are indistinguishable. Within the valley between the Aberdare Mts., and the Mau-Sotik Range we get intermediate birds—some showing the pale underside, others being greyish as in typical *hypochlorus*. Thus the ranges of the two are not clear-cut and defined. The two forms, however, are quite recognisable.

South Ankole, Toro, Budongo, Bugoma, Lugalambo, West Elgon ; Kimiriri, Kaimosi, Kisumu, Kibos, Fort Ternan, Elgeyu, Maraquet.

1264. **Eminia lepida hypochlorus** Mearns. **Kenia Grey-capped Swamp Warbler.**

The only characters which really distinguish this race are the darker, more greyish underside, and paler under wing-coverts. The range is from the Kenia district south to Ukamba, west to the Loita and into the Rift Valley.

Kenia, Fort Hall (type loc.), Kyambu, Nairobi, Naivasha, Escarpment, Molo.

1265. **Macrosphenus flavicans ugandae** van Som. **Golden-flanked Long-billed Warbler.**

The young (September, October) is greenish yellow above without a grey head, and brighter yellowish below, quite different from *M. zenkeri*, which is a good species. The series endorses the distinctness.

Western Uganda east to Busoga Province. I have not taken it near Elgon: Budongo, Bugoma, Mabira, Lugalambo.

1266. **Macrosphenus zenkeri** Rchw. **Pale Olive Long-billed Warbler.**

The young are like adults, but rather more greenish.

West Uganda to Mabira: Lugalambo, Buremezi in Mabira.

1267. **Hylia prasina** Cass. **Green Forest Warbler.**

I can see no difference between typical birds and those from Uganda, but the Elgon birds are larger and greyer below, More material desirable.

The young is like the adult on the back, but less dark on the crown, the underside washed with greenish.

The range is throughout the wooded parts of Uganda east to Mt. Elgon, and the Nandi Escarpment.

Budongo, Bugoma, Kigezi, Entebbe, Mabira, Sezibwa, Lugalambo, Elgon. (Kaimosi and Kakamegoes ? different race.)

1268. **Schoenicola apicalis** Cab. **Fan-tailed Warbler.**

C. brunneiceps Rchw. 1907.

I have insufficient material, but what there is suggests that there are at least three races: (1) South Africa and Benguella; (2) North Angola; (3) East Africa and Uganda (= *brunneiceps* Rchw.). Reichenow admits that the type of *brunneiceps* is a youngish bird. I see no difference between Uganda and East African specimens.

Toro, Entebbe, Soronko, Elgon; Kimiriri River, North Kavirondo, Burnt Forest, Maraquet, Nakuru, Nairobi, Kyambu, Fort Hall.

1269. **Bradypterus altumi** van Som. **Molo Narrow-tailed Swamp Warbler.**

Bull. B.O. Club, xl. p. 22, 1919.

The description of this bird reads much like that of *B. babaeculus fraterculus* Mearns 1914, but as his bird is a race of *babaeculus* it must have a broad tail, of twelve feathers, not narrow, decomposed, and numbering ten only! The two must belong to different groups.

Highlands of Kenya Colony from Mau to Aberdares and Kenya.

1270. **Bradypterus cinnamomeus** subsp. **Ankole Cinnamon Swamp Warbler.**

A very dark race of *B. cinnamomeus*, being very dark brown above, with crown darker than mantle or same colour ; the chestnut brown of the breast and flanks very dark, almost as dark as the mantle.

Kigezi, South Ankole, in Uganda.

1271. **Bradypterus cinnamomeus elgonensis** Mad. **Elgon Cinnamon Swamp Warbler.**

There seem to be two groups, the Elgon birds being of a darker rufous, with darker tails, than the Molo specimens, which are altogether paler. The breast-band is very broad and wide in the middle.

Darker : Bumasifa on Elgon, Bukedi, in Uganda.

Paler : Molo, Maraquet, Burnt Forest, in East Africa.

1272. **Bradypterus cinnamomeus ? salvadorii** Neum. **Kenya Cinnamon Swamp Warbler.**

These birds are as dark as the Elgon race, but not nearly so dark as the Ankole specimens, but like the latter they have the white of the throat well defined and clear cut. They differ from the Elgon race in having the breast-band narrower, not so wide in the middle of the breast. They are altogether darker than the Molo birds.

Ten skins collected by Wm. Doherty at Escarpment (probably in the Lari Swamp) have the throat not pure white, and the area of white on the abdomen is rather limited. The series is very uniform, but I think they must be soiled ! I very much doubt if there is one race on the top of the Aberdare Mts. and another at the foot of the Escarpment.

Menengai Volcano, Nakuru, Aberdare Mts., and Mt. Kenya at 8,000 feet.

1273. **Bradypterus brachypterus ? centralis** Neum. **Nairobi Speckled-throated Swamp Warbler.**

The type of *centralis* came from Lake Kivu, South Ankole, and was described from a very worn, dilapidated specimen; with this Neumann united another very worn skin collected by Doherty at the Escarpment. My series of fresh full-plumaged birds are so very different that I am inclined to think that they must belong to another race, especially as Kivu birds are not usually like Nairobi ones, and these birds are very local ! However, until a series is obtained from Kivu, one cannot decide the question. They are much like *B. abyssinicus*.

Nairobi Swamps to Elgon and Kivu !

Nairobi, Kikuyu, Kisumu, Kibingei, and Kirimiri Rivers, in North Kavirondo ; Bukedi, Elgon, in Uganda.

1274. **Bradypterus yokanae** van Som. **Uganda White-winged Swamp Warbler.**

Bull. B.O. Club, xl. p. 21, 1919.

This bird apparently belongs to the group to which *B. graueri* Hartert and *B. carpalis* Chapin belong. It is distinguished by its very black brown upper surface and white spotted wings.

The range appears to be the swamps of the Sezibwa River basin.

Sezibwa River in Uganda.

1275. **Calamocichla ansorgei nilotica** Neum. **Nile Long-clawed Reed Warbler.**

These birds appear to be *C. a. nilotica* of Neumann, but there is some doubt that they are a race of *ansorgei* Hart. There are certainly three distinct plumages: (1) The nestling plumage, which is a bright brown on the upper surface, slightly darker wings and tail; lower surface whitish sandy buff, with paler throat and abdomen, gape yellow! Changes by moult into (2) dark hair brown mantle, lower surface sandy buff; by a further moult into full plumage (3), which is dark ashy brown above, grey below with whitish or paler grey throat and centre of abdomen, gape orange.

The range of this bird appears to be the Nile province of Uganda along the chain of the Kioga Swamps to the Victoria Nyanza.

Kisumu Swamps and Sezibwa River.

1276. **Calamocichla jacksoni** Neum. **Jackson's Long-clawed Reed Warbler.**

The same sequence of plumages, but in the adult the upper surface is not so dark, and the lower surface, instead of being greyish, is buffy whitish with olive brownish on the sides of the chest and flanks.

The type of this bird is a specimen in the second plumage and probably a female.

The swamps on the north and east of Lake Victoria Nyanza: Kisumu Swamps and Entebbe Swamps.

1277. **Calamocichla leptorhyncha parva** Fisch. & Rchw. **Naivasha Long-clawed Reed Warbler.**

Bradypterus macrorhynchus Jacks.

A smaller edition of the greyish *C. a. nilotica*, inhabiting Victoria Nyanza. These birds are more olive-greyish above and greyer below than birds found in the swamps of the Nairobi district. These latter are like *C. jacksoni*, but larger! Of this Nairobi form I have 10 ad. ♂, 4 ad. ♀, 6 juv.

At one time I was led to think that possibly there were two distinct birds inhabiting the *Nairobi* Swamps, a brownish and a darker-backed species; but the paler birds are really the second plumage of the darker bird. The young and intermediate birds have yellow mouths, the adults orange ones. If the Naivasha and Nairobi birds are the same, then the range would be from Naivasha to Simba and Kilimanjaro. More Naivasha birds required.

Lake Naivasha (only two skins); Nairobi and Simba in Taveta.

1278. **Acrocephalus arundinaceus arundinaceus** Linn. **Great Reed Warbler.**

These birds belong to the western race. They are fairly common on migration.

Masindi in Uganda; Tsavo, Voi, and Bura in East Africa.

1279. **Acrocephalus griseldis** Hartl. **Lesser Great Reed Warbler.**

This bird, described from Nguru, has remained unique. (Cf. Nov. Zool. 1920, p. 464!)

1280. **Acrocephalus palustris** Bechst. **Marsh Warbler.**

Fairly common during the winter months.
Masindi; Kisumu and Nairobi.

1281. **Acrocephalus scirpaceus scirpaceus** Herm. **European Reed Warbler.**

Masindi; Naivasha, Nairobi, and Taveta.

1282. **Acrocephalus baeticatus** Vieill. **African Reed Warbler.**

? *A. cinnamomeus* Rchw.
My two specimens are rather more rufescent than South African ones, and may be *cinnamomeus* of Reichenow from Lake Albert, if different. (They are not *A. agricola* !) This is a resident breeding bird.
Kisumu.

1283. **Acrocephalus schoenobaenus** Linn. **Sedge Warbler.**

The young bird shot 12.xii. has the breast still heavily speckled. The moults are most interesting. Adults are in heavy moult in December and February, and young birds (?beyond the nestling plumage) are still in heavy moult in April. (Cf. *Sylvia nisoria* and *Agrobates g. syriacus*.)
Masindi; Kisumu, Nakuru, Naivasha, Nairobi.

1284. **Hippolais olivetorum** Strickl. **Large Olive-Grey Warbler.**

Not common, but occasionally captured on migration.
Simba and Sagala in Teita.

1285. **Hippolais languida** Hempr. **Large Pale Warbler.**

A series of forty skins includes birds in all stages of moult. Birds in full fresh plumage are found in January, March, and April, while some have not yet quite finished their moult in the same months; there are, however, quite a number which are very worn and show little or no fresh feathers in December, March, and April. These are probably birds of the previous year which would not breed in the year. These birds are found, during the winter, well away from water in the dry thorn-bush country of the Teita and Taru Desert, where they are particularly common.
Marsabit (A. B. Percival), Kisumu, Simba, Tsavo, Taveta.

1286. **Hippolais pallida elaeica** Lind. **Little Olive-grey Warbler.**

I find much variation in the colour of the mantles in these birds, some being quite greyish olive-green, while others are greyish, without the olive tinge. Dr. Hartert, who has examined these birds, assures me that they are all *elaeica*—apparently *pallida pallida* does not extend to East Africa even as a migrant. I have looked over a large material of *Hippolais* from East Africa and find no specimen of *opaca*. Their haunts are the dry thorn-bush country and scrub. Very common in the Tsavo area.
Kobua River, Lake Rudolf, in Uganda; Kisumu, Naivasha, Simba, Tsavo, Lake Jipe, Changamwe, Embu, Tana, Lodomoru (A. B. Percival leg.).

1287. **Locustella fluviatilis** Wolf. **River Warbler.**

Not a common migrant. Haunts the swamps.

Taveta, Nairobi (A. B. Percival leg.).

1288. **Sylvia borin borin** Bodd. **Garden Warbler.**

A very early arrival in the autumn and a late bird to depart. The May bird is the latest noticed. Found in forests and gardens.

Entebbe in Uganda; Elgon, Kisumu, Nairobi, Tsavo in Taveta, in East Africa.

1289. **Sylvia atricapilla** Linn. **Black-cap.**

Bumasifa, Elgon, Nairobi, Kyambu.

1290. **Sylvia communis communis** Lath. **Common Whitethroat.**

Here also we find birds in April, which are still in very worn plumage, showing no attempt at moulting either body or flight feathers, while others at the same time are in full fresh plumage.

Kobua River in South Uganda; Kisumu, Nairobi, Simba, Tsavo.

1291. **Sylvia nisoria nisoria** Bechst. **Barred Warbler.**

This bird was first recorded from East Africa by A. B. Percival in 1917. Since then my collectors have taken a fair number. The moults are irregular. Young show no signs of change in March.

Kobua near Lake Rudolf, Meuressi, Turkwell; Simba, Tsavo, Teita, Taveta.

1292. **Phylloscopus trochilus trochilus** Linn. **Willow Wren.**

I have carefully gone over each one of these specimens and forty others from Africa, and find not one *collybita* amongst them. As regards *eversmanni* I am in doubt. If size is any really determining factor in the separating of this race, then there would be at least eight of my fifty birds *eversmanni*, having wings of 70 to 73 mm. Much variation exists in regard to the size of the first primary. There are quite a few specimens with this feather just over the length of the primary coverts, and there are a great many with very large long first primaries. I would draw attention to two specimens taken in June! The moult in these, as in *H. languida*, is very erratic.

Mubendi, Bira, Bumasifa, Elgon, Kobua near Rudolf; Kisumu, Nakuru, Naivasha, Nairobi, Simba, Tsavo, Changamwe, and Orr Valley (A. B. Percival).

1293. **Crateropus hindei** Sharpe. **Speckled Bubbling Thrush.**

These birds in fresh plumage show the most extraordinary variation. One specimen has the whole of the breast and abdomen pure white, thus resembling somewhat *C. hypoleucos*, but the upperside is that of typical *hindei*.

Ukamba and South Kenya Province.

Fort Hall, Kitui, River N'ziu, Ukamba.

1294. **Crateropus hypoleucos** Cab. **East African Pied Babbling Thrush.**

The range appears to be South Kenya, Ukamba, Kikuyu, and Teita Province, to the coast, though I have not taken it in Teita or Seyedi.

Nairobi, Fort Hall, Simba, Kitui.

1295. **Crateropus squamulatus** Shell. **Coastal Scaly Babbling Thrush.**

Apparently limited to the coastal area from South Tana, Lamu to Pangani. Young birds are paler than adults and have whitish throats.

Lamu, Manda, Mombasa.

1296. **Crateropus plebeus emini** Neum. **Ankole Spiny Babbling Thrush.**

This race is quite good. In Uganda it does not appear to penetrate farther than South Toro. The typical birds come from south-west shore of Lake Victoria.

Buddu, Kagera, Mohokya.

1297. **Crateropus plebeius cinereus** Heugl. **Nile Spiny Babbling Thrush.**

C. buxtoni Sharpe.

There is some variation in the plumage of this bird. I find two which have the underside from the breast to the vent creamy buff, thus being somewhat like typical *C. plebeius*. Others again are very greyish below. The bird from Lali Soroti is particularly pale. The range appears to be Unyoro and Nile Province of Uganda to West Rudolf, south to Mt. Elgon and the Kavirondo area.

Masindi, Budongo, Namasagoli Soroti, Lali Soronko, Elgon, in Uganda; Kisumu, Kibos, Fort Ternan, in East Africa.

1298. **Crateropus plebeius kikuyuensis** Neum. **Kikuyu Spiny Babbling Thrush.**

This is a recognisable race, being rather darker than the birds of Uganda or Tanganyika Territory.

Kikuyu and Naivasha districts, South Loita.

1299. **Crateropus melanops sharpei** Rchw. **Sharpe's Scaly Babbling Thrush.**

C. grisescens Rchw.

This race ranges from the south shore of Victoria Nyanza through Western Uganda and along the north shore to Elgon and the Kavirondo country. *C. grisescens* of Reichenow, described from the type locality of *sharpei*, is a synonym, and probably founded on an immature specimen in second plumage.

Ankole, Budongo, Mubendi, Kalwanga, Jinja, and Elgon; Kisumu, Kaimosi, Kibigori.

1300. **Crateropus melanops clamosus** van Som. **Kikuyu Scaly Babbling Thrush.**

Bull. B.O. Club, xl. p. 95, 1920.

This bird is nearest to *melanops sharpei*, but differs by being much darker above, and more decided by dark grey below, with the centres of the feathers dark. The throat is white with the shaft-spots blackish. Wings and tail darker black-brown. Wings: 110–115 mm.

Rift Valley from Nakuru south to Naivasha and the Kikuyu Hills.

1301. **Argya aylmeri mentalis** Rchw. **Scaly Brown Scrub Chatterer.**

A. keniana Jacks.

I have no topo-typical specimens for comparison, but my birds agree with specimens from Moschi. With regard to *keniana* of Jackson, my two birds from just about the type locality are rather less rufous on the mantle than more southern specimens, but I doubt if it is a good race. Jackson did not compare his bird with *mentalis*, but with typical *aylmeri*, which is recognisable at a glance. The young *mentalis* is paler above and below than the adult, and has no scaly feathers on the throat.

South Kenya to the plains and scrub of East Kilimanjaro: Mumosi, Kitui, Tsavo, M'buyuni, Campi-ya-bibi, Taveta.

1302. **Argya rubiginosa rubiginosa** Rüpp. **Northern Rufous Scrub Chatterer.**

These birds are paler, less dark rufescent on the back than more southern ones, and agree with South Ethiopian specimens which are said to be typical. I find, however, that two topo-typical birds of *rufula* Heugl. (*heuglini* Sharpe) are paler.

Nile Province of Uganda to Rudolf and the Frontier (Marsabit area): W. Rudolf, Kerio, Marsabit.

1303. **Argya rubiginosa emini** Rchw. **Dark-backed Rufous Scrub Chatterer.**

Birds ranging from the Kenia to the Ukamba country are noticeably darker on the back wings and tails than typical *rubiginosa*, and as the name *emini* has been applied to the Massailand birds it probably includes East African ones. If it is shown that the Tanganyika Territory bird is different, it would require a new name. Sclater and Praed unite *emini* with *rubiginosa*, but I do not think this is correct.

South Kenya, Fort Hall, Kitui, Simba, Masongoleni.

1304. **Argya rubiginosa saturata** Sharpe. **Coastal Rufous Scrub Chatterer.**

The intense coloration, together with the rufous loral spot and dark shafts to the feathers of the mantle, distinguish this bird from other races. The range is from the coast at Lamu, south to the Pangani, penetrating inland only as far as the South Teita country. It meets with Argya *emini*, but no intermediates are known.

Lamu, Changamwe, Mombasa, Samburu, Sagala, Teita, Bura, Taveta.

(It would appear that *rubiginosa* Rüpp. from Shoa is the oldest name. Heuglin procured a bird from Gondokoro which he considered to be distinct from *rubiginosa* and named it *rufescens*. Sharpe, when writing the *Catalogue of Birds*, vol. vii, discovered that the name *rufescens* could not be used for the Gondokoro bird, as it was preoccupied by an Indian species. He accordingly renamed the Gondokoro bird *A. heuglini*, which he had not seen (but accepted Heuglin's word that it was different, *vide Cat. B.*, vol. vii. pp. 391, 392.) He united with it two birds in the British Museum, one from Mombasa, the other from Zanzibar; not having a Gondokoro specimen he gives a description of the Mombasa or Zanzibar one, not for purposes of a diagnosis, but to conform with the plan of the catalogue. Subsequently in 1895, when reporting on a Somaliland

collection, he discovered that the Zanzibar bird was not the same as the Gondokoro one, and named the Zanzibar bird *saturata*. He did not rename the Gondokoro bird this time! He also found that Reichenow had drawn attention to the fact that Heuglin himself had found that *rufescens* was preoccupied and had already renamed the Gondokoro bird *rufula*! Sharpe's note in *P.Z.S.* 1895, p. 488, fully explains the confusion, and we must accept this. His own words are: "This bird, *heuglini*, was discovered at Gondokoro." Dr. Hartert and Lord Rothschild agree with my view, which differs from that of Zedlitz (*Journ. f. Orn.* 1916, p. 162) and Sclater and Praed (*Ibis*, 1918, p. 692).

1305. **Cichladusa arquata** Peters. **Collared Babbler.**

Coast of British East Africa and again in the Kagera River area in South Ankole. Mombasa specimens should be examined.

Changamwe, Mombasa. 2 ad., 1 juv.

1306. **Cichladusa guttata rufipennis** Sharpe. **Lamu Speckled Babbler.**

This is a small bird with a greyish tinge to the crown, and pale back. Wings: 80–82 mm.

Coast district only: Lamu Island.

1307. **Cichladusa guttata** Heugl. **Lake Rudolf Speckled Babbler.**

Larger than typical birds with a more yellowish brown mantle and long tails and wings. Wing, 85–92; tail, 86–94 mm.

Such birds are found in Moroto, Meuressi, Turkana, Turkwell, Kerio River, West Rudolf.

1308. **Cichladusa guttata? Ukamba Speckled Babbler.**

These birds are smaller than the Rudolf ones and darker on the mantle; the crown is more distinctly streaked and the spotting on the underside more numerous, larger, and blacker. They thus differ considerably from the Lamu race *rufipennis*. Wings: 76–83 mm. More material is necessary to understand the variation in this species.

Simba, Kitui, Sagala, Taveta.

1309. **Erythropygia quadrivirgata** Rchw. **Buff-breasted Scrub Chat.**

This species ranges along the coast and penetrates inland to the Teita and South Ukamba districts. The birds found in Manda and north of this in the Juba district are paler and probably *erlangeri* Rchw.

Sagala, Teita, Mombasa, Changamwe, Manda Island.

1310. **Erythropygia leucoptera vulpina** Rchw. **Grey-streaked Scrub Chat.**

Compared with typical *leucoptera*, this form is less clear grey on the crown, having this part washed with ochraceous brown, caused by the brown of the upper back extending to the nape and hind part of the crown. The brown of the back is of a deeper shade, and the grey streaks on the breast are more pronounced.

From the Baringo and Tana district, south and west through Ukambani, to the plains east of Kilimanjaro. In the North-west Ukamba area we get an inter-

mediate form between this and *brunneiceps* Rchw. from Nguruman, but a series is necessary to show whether these intermediates cover any definite area.

Baringo, Marsabit (Percival), Simba, Tsavo, Voi, Campi-ya-bibi, Lake Jipe, Maungu, Masongoleni, Sagala, Teita, Taru, and Samburu.

1311. **Erythropygia leucoptera** ? subsp.

Three birds resemble typical *leucoptera* in the colour of the underparts, but are paler on the mantle, less rufous. They have greyer crowns than *vulpina*.

Meuressi, Turkwell, Kerio, Rudolf.

1312. **Erythropygia leucoptera brunneiceps** Rchw. **N'guruman Scrub Chat.**

These birds (from near the type locality) agree perfectly with a cotype of *brunneiceps* in the Tring Museum. This race is recognised by its larger bill, darker, more brownish olive head, less rufous, more olive-rufous mantle and distinct black streaks on the breast. As remarked before, Simba birds are intermediate between this and *vulpina*.

N'guruman district through the South Guasso N'yiro area to South Loita. It probably meets with the next race in the Loita Valley: Magadi Lake, South Guasso N'yiro.

1313. **Erythropygia leucoptera ukambensis** Sharpe. **Ukamba Scrub Chat.**

Apparently a common bird in the Escarpment district where Doherty collected a good series.

Ukamba to the Kikuyu Hills, Naivasha.

1314. **Erythropygia ruficauda** ? subsp. **Kavirondo Red-tailed Scrub Chat.**

I have no typical birds from Malimbe to compare, and as the distance between South Kavirondo and Malimbe is very great, it is most probable that these birds differ, especially since the form of *ruficauda* from the Kivu area is much darker, more rufous on the back, than Kisumu birds. I have united my specimens pending examination of Malimbe specimens.

South and North Kavirondo (Kisumu, Kendu Bay, Kaimosi); South Ankole, Kigezi, Kivu.

1315. **Erythropygia hartlaubi** Rchw. **Uganda Black-backed Scrub Chat.**

I find that my birds from Kenya are very much darker on the mantle, and have the crown almost black. They have the breast-markings much more distinct and are slightly larger. It is quite possible that Kenia birds are separable, but more material is required.

South Ankole Buda, Masindi, Chagwe, Jinja, in Uganda; Kisumu, Kaimosi, Loita, Nairobi, Fort Hall, south of Kenya in East Africa.

1316. **Neocossyphus rufus** Fisch. & Rchw. **Rufous Chat Thrush.**

Not common.

Coastlands from Malindi to the Pagani (type locality), Mombasa.

(**Neocossyphus praepectoralis** Jacks. **Uganda Rufous Chat Thrush.**

(Type locality: Toro, Uganda.)

1317. **Turdus gurneyi keniensis** Mearns. **Kenia Rufous-breasted Thrush.**

Though near *piaggiae*, this subspecies can be distinguished from the latter by having the upperside much darker green-olive, with a dark tail; less deep rufous on the crown; the rufous of the throat rather darker. No white tips to the tail-feathers.

Mt. Kenya and Aberdare Hills.

1318. **Turdus gurneyi piaggiae** Bouv. ? **Mt. Uraguess Rufous-breasted Thrush.**

A single specimen taken by Mr. Blayney Percival on Mt. Uraguess, South Marsabit district, agrees with typical *piaggiae* in the colour above and below, but has less rufous on the forehead and crown. It is paler than *keniensis*.

1319. **Turdus gurneyi rayneyi** Mearns.

? *kilimensis* Neum.

Mt. M'bololo, North-east Kilimanjaro.

1320. **Turdus fischeri** Hellm. **Coastal Spotted Thrush.**

Coast to Pangani.

1321. **Turdus olivaceus elgonensis** Sharpe. **Elgon Rufous-bellied Thrush.**

T. johnstoni Sharpe.

When compared with *abyssinicus* it is evident that the latter are more tinged with ochraceous on the breast and the throats are paler. The Elgon birds are more greyish on the breast-band.

Entebbe, east to Elgon and south along the Forest Highlands to Nairobi and Kenia: Elgon, Maraquet, Elgeyu, Burnt Forest, Molo, Kikuyu, Kabete, Nairobi; Entebbe and M'bale, Bukedi.

1322. **Turdus olivaceus polius** Mearns. **Mt. Uraguess Rufous-bellied Thrush.**

These birds are separable from *elgonensis*, but I fail to see how they differ from *abyssinicus*. The wings measure 112–117 mm.

Mt. Uraguess, South Marsabit.

1323. **Turdus olivaceus bambusicola** Neum. **Ankole Rufous-bellied Thrush.**

Very like *elgonensis*, but with a paler throat, with distinct lines.

Kagera-Kivu area.

1324. **Turdus baraka** Sharpe. **Ruwenzori Rufous-bellied Thrush.**

Ruwenzori area.

1325. **Turdus pelios centralis** Rchw. **Uganda Pale-bellied Thrush.**

I find the palest bird with the whitish throat from West Rudolf, the darkest from Entebbe.

The range is throughout Uganda, except in the northern area, and south to the Elgon-Nandi Range. Elgon birds are slightly paler on the mantle, more greyish, less olive.

Masindi, Bugoma, Budongo, Busiro, Entebbe; Lugalambo, Mubango, Meuressi, Elgon, Bukedi, Kavirondo.

1326. **Turdus libonyanus tephronotus** Cab. **Taru Pale Grey-backed Thrush.**

Birds from Lamu, Manda, and Juba River are paler below than typical *tephronotus*, with clear grey breast-bands, lacking the ochraceous tinge, and with the throat area not outlined with buff, but with white, and streaked with black. These characters are constant in my series, but I await further material.

The scrub area east of Kilimanjaro and Teita, east to South Ukamba and the Juba district: Kitui, Ndi, Tsavo, Masongoleni, Maungu, Lamu, Manda [Juba River (A. B. Percival)].

1327. **Luscinia luscinia** Linn. **Sprosser.**

Common on migration.
Nairobi, Simba, Tsavo, Taveta.

1328. **Luscinia megarhyncha** Brehm. **Nightingale.**

One specimen was shot along with a Sprosser in my garden.
Nairobi, Teita. 3 ♂.

1329. **Irania gutturalis** Guér. **White-throated Chat.**

These birds are somewhat dichromatic. Adult males are either uniform creamy buff or rufous orange on the underside. Intermediates between these types are found. Not common.
Simba, Tsavo, Taveta.

1330. **Cossypha natalensis** Smith. **Grey-winged Rufous Cossypha.**

C. n. intensa Mearns. ? *C. n. garguess* Mearns.

These birds vary considerably in colour and in size. My smallest birds come from Taveta, but Taveta birds are not dark, rather pale in fact, but a Lake Jipe specimen is very big, having a wing of 100 mm. My largest bird comes from South Ankole and its wing measures 102 mm.

Though I have examined a big series, I cannot recognise any constant differences, warranting the separation into geographical forms. I have no Uraguess birds, but birds from this locality may very likely be different, because of the peculiar nature of the country.

C. and W. Uganda, Kilimanjaro and Ukamba district: Taveta, Lake Jipe, Sagala, Changamwe; South Ankole, Mubango, Lugalambo.

1331. **Cossypha cyanocampter bartteloti** Shell. **Blue-shouldered Cossypha.**

I was surprised to find this bird on Mount Elgon and on the Nandi Range. There are slight differences in the birds from Elgon, but the specimens from this locality are soiled, so one cannot attach much value to their colour.

West Uganda to Elgon and Nandi: Bugoma, Budongo, Lugalambo; Kakamegoes and Kaimosi in North Kavirondo.

1332. **Cossypha caffra iolaema** Rchw. **Red-headed Cossypha.**

C. c. mauensis Neum.

I have no typical Kilimanjaro birds, but if the highland form really differs, it would have to be called *mauensis* Neum.

The birds from Kivu and Kagera are somewhat darker than East African

ones, and may possibly belong to a recognisable race, but more material is necessary. I find amongst my Naivasha specimens, one just as dark. The coloration is, however, on the whole, constant.

Highlands of Kenya Colony, Elgon and South Ankole district of Uganda: Elgon, Bukedi in Uganda, Burnt Forest, Elgeyi, Mau, Kikuyu, Nairobi, Kenya.

1333. **Cossypha somereni** Hart. **Small White-striped Cossypha.**

The wings vary from 74 to 85 mm.

The range, so far as is known, is from the forests of Central Uganda to Elgon and North Kavirondo: Mabira, Lugalambo; South Elgon and Kaimosi.

1334. **Cossypha archeri** Sharpe. **Ruwenzori Little Rufous Cossypha.**

This bird appears to be limited to the Ruwenzori Range, south to the Kigezi country in South Ankole.

1335. **Cossypha verticalis melanonota** Cab. **White-crowned Cossypha.**

The Uganda and Elgon birds are very rufous, and those from south of the Nandi Range are very big, with longer wings, heavier, longer bills, and more intensely coloured, but more specimens are required.

West Uganda from Ankole and Masindi, east to Mt. Elgon: South Ankole, Budu, Bugoma, Budongo, Masindi, Kyetume, and Elgon; Kaimosi, Kakamegoes, North Kavirondo, and South Nandi.

1336. **Cossypha heuglini occidentalis** Rchw. **Ankole Large White-eyebrowed Cossypha.**

Very dark rich rufous on the underside, and darker on the mantle than typical *heuglini*, or the birds from Elgon. Quite distinct from *subrufescens*, having olive-greyish instead of black central tail-feathers.

Ankole to Kivu: South Ankole, Kigezi, in Uganda.

1337. **Cossypha heuglini intermedia** Cab. **Coastal White-striped Cossypha.**

(Restricted type locality: coast of Kenya Colony.)

A dark race of *heuglini*. It is considerably smaller, the wings of fifteen specimens measuring ♂ 90 to 97, ♀ 82 to 88 mm.

This small race ranges from the coast of Pangani to the Juba, and goes inland to the Teita and South Ukambba district: Changamwe, Mombasa, Teita, Sagala, Bura, Taru.

1338. (?) **Cossypha heuglini** Hartl. **Uganda White-striped Cossypha.**

I am not satisfied with the identification of these birds, owing to the want of topo-typical specimens. It is probable that the North-west Unyoro birds are typical, the Elgon and Highland ones not. Wings: East Africa: ♂, 101–108 (most 104); ♀, 92–95 mm. Uganda: ♂, 100–103; ♀, 90–92 mm.

If not separable, the range would be West Uganda from the shores of Lake Albert and Ruwenzori east to Mt. Elgon and south to Nairobi district and Mt. Kenia: Moroto, Kawala, Kikoma, in Uganda; Loita, Nairobi, Nakuru, Kenia, Elgon, Nyarondo, Kisumu, Fort Ternan, in Kenya colony.

1339. **Cossypha semirufa intercedens** Cab. **East African Black-tailed Cossypha.**

(Type locality: Kitui.)

These birds occur in the same territory as the *heuglini* form, but can be readily recognised by the black central tail-feathers.

Wings: ♂, 92–93; ♀, 84 mm.

Kitui, Nairobi, Escarpment.

1340. **Cossypha semirufa** near **saturatior** Neum. **Marsabit Cossypha.**

I have a single specimen from Marsabit of a *Cossypha* belonging to the *semirufa* group which is nearest to *saturatior* in colour of the upper parts, but the lower surface is richer rufous and the abdomen like the breast, not paler and inclining to buff. The rufous feathers in the tail are chestnut.

1341. **Callene aequatorialis** Jacks. **Little Orange-breasted Forest Cossypha.**

Elgon and Nandi, south to Sotik and Molo: Kaimosi on Elgon, Lumbwa, Maraquet.

1342. **Monticola saxatalis** Linn. **Rock Thrush.**

Common during migration.

1343. **Monticola rufocinerea rufocinerea** (? **sclateri** Hart.).

Two specimens taken at Naivasha agree well with the South Arabian bird described by Dr. Hartert as *sclateri*, while the Mt. Moroto to West Rudolf birds agree better with typical *rufocinerea*. *M. r. sclateri* was separated principally because South Arabian birds had a much wider black tip to the tail-feathers. This is certainly the case in the series in Tring. When describing this new race Hartert mentions a bird shot by Doherty at Escarpment which has this black tip to the tail almost 15 mm. wide and suggested that additional material might show it to be another recognisable race. Now, my two Naivasha birds, from nearly the same locality, are not like Doherty's birds, and as already stated do not differ appreciably from *M. r. sclateri*. Can it be that *sclateri* is migratory?

Mt. Moroto, West Lake Rudolf district, in Uganda; Naivasha.

1344. **Oenanthe familiaris** near **omoensis** Neum. **Red-tailed Grey Chat.**

1 ♂ shot at Kigezi (Ankole) is in full fresh plumage and has a distinctly greyish back; the under tail-coverts are buff. It is nearest to *omoensis*, but differs by having the throat whitish, not grey like the breast. The type and cotype of *omoensis* are very worn. An adult in moult collected by Grauer at Kivu has the new feathers on the mantle brownish grey, not pure grey, like my birds. Further material will probably show these birds to be distinct.

1345. **Oenanthe heuglini** Hartl. **Little Brown-breasted Chat.**

The capture of a ♂, 24.vii.1917, in Kisumu (Kavirondo) extends its range considerably.

1346. **Oenanthe pileata albinotata** Neum. **East African Banded Chat.**

? *O. livingstonii.*

Although *livingstonii* and *albinotata* have been united with *pileata*, I believe that two or three races should be upheld, and certainly the Massailand one. Birds from Kenya Colony never get a complete black cap extending to the nape.

Naivasha, Nakuru, Nairobi, Athi, M'buyuni, Campi-ya-bibi.

1347. **Oenanthe oenanthe oenanthe** Linn., **? rostrata and ? leucorhoa. Wheatear.**

It is difficult to decide whether or not to recognise the race *rostrata* Hempr. and Ehr. I find in my series no less than nine birds which have very long bills, as in *rostrata*, while the others have short, thicker bills. Also we find very big specimens with wings of 100–106, thus being as large as the Greenland form, *leucorhoa*. A common migrant.

1348. **Oenanthe isabellina** Cretzschm. **Isabelline Wheatear.**

Kisumu, Kyambu, Nairobi, Simba, Tsavo, Bura, Magadi.

1349. **Oenanthe schalowi** Fisch. & Rchw. **Massai Buff-tailed Chat.**

Considerable variation exists in the females, some being dark, others pale on the lower surface.

The more rocky parts of the Highlands—Escarpment to Molo, Naivasha, Nakuru.

1350. **Oenanthe leucomela pleschanka** Lepech. **Pied Chat.**

Common during the winter months.

1351. **Cercomela fuscicaudata turkana** van Som. **Grey Desert Chat.**

Bull. B.O. Club, xl. p. 91, 1920.

Nearest to *fuscicaudata* Blanf., but differs by being paler, less deep greyish brown, more ashy grey with an ochraceous tinge to the crown and back, while the edges of the tail-feathers, which are similar in colour to the mantle, are buff, not rusty brown.

Known only from a ♂ and ♀ from Kobua and Meuressi in the Turkana district.

1352. **Myrmecocichla cryptoleuca** Sharpe. **Kikuyu White-winged Black Chat.**

A common species, ranging from the North Ukamba district north to the Uasingishu and Sotik, where it meets with *M. nigra*.

Kikuyu, Eldoret, Nakuru.

1353. **Myrmecocichla nigra** Vieill. **Uganda Black Chat.**

A common species ranging from the west and south-west of Uganda, east to Elgon and South Kavirondo.

Kawala, Singo, Bugoma, Entebbe, in Uganda; Kibigori and Fort Ternan in East Africa.

1354. **Pentholaea clericalis** Hartl. **White-capped Black Chat.**

? *P. baucis* Hartl.

Occurs in the Nile Province of Uganda.

1355. **Thamnolaea subrufipennis** Rchw. **Rufous-bellied Mountain Chat.**

Not very common. I find very little difference between the Uganda and Kilimanjaro birds.

Lai Soroti in Uganda ; Naivasha and Sagala Teita in East Africa.

1356. **Pinarochroa sordida ernesti** Sharpe. **Kenia Mountain Chat.**

Aberdare Range and Mt. Kenia.

1357. **Pinarochroa sordida hypospodia** Shelley. **Kilimanjaro Mountain Chat.**

I have no specimen.

1358. **Pinarochroa sordida rudolfi** Mad. **Elgon Mountain Chat.**

Appears to be very close to *ernesti*.

1359. **Pogonocichla elgonensis** Sharpe. **Elgon Black-tailed Forest Chat.**

This distinct species is not by any means so common as *P. c. keniensis*. Besides the uniform black tail, this bird has all the secondaries edged with grey. The young bird is not so much washed with yellowish green below, as in *P. c. keniensis*.

Limited to Mt. Elgon.

1360. **Pogonocichla cucullata ruwenzori** Og.-Grant. **Uganda Yellow-breasted Forest Chat.**

P. eurydesmus Rchw.

P. intensus Sharpe.

Smaller than *keniensis* and more richly coloured. The young birds are also much darker, being more heavily spotted on the underside.

South-west Uganda to Ruwenzori and ? to Entebbe : Kigezi in South Ankole.

1361. **Pogonocichla cucullata keniensis** Mearns. **East African Yellow-breasted Forest Chat.**

P. orientalis (nec. Fisch. and Rchw.) auct. !

Birds from the Mau and Elgeyu Hills are not separable from the Kenia race. This form is distributed throughout the highlands, as far north as the Nandi Ridge, but does not occur in the forests of North Kavirondo. The tail-markings vary with age. The young birds have the inner webs of the outer tail-feathers yellow without a terminal band.

Elgeyu, Maraquet, Londiani, Molo, Aberdare Mts., N'gong, Kyambu, Nairobi, and Mt. Kenia.

1362. **Pogonocichla cucullata orientalis** Fisch. & Rchw. **Coast Yellow-breasted Forest Chat.**

? *P. guttifer* Rchw. ?

P. helleri Mearns.

? *P. olivacea* Rchw.

This race was described from the Pangani district, and differs from the other East African forms by having all the secondaries and inner primaries edged with olive-green.

I doubt if a distinct form occurs on the Usambara Hills, and the Kilimanjaro birds are the same.

Morogoro and Kilimanjaro.

1363. **Alethe poliothorax** Rchw. **Rufous-backed Forest Ground Thrush.**

I have no typical *poliothorax*, but find the Elgon birds to be less rufescent on the head and back than Kivu and Ankole ones. A series will probably show this to be constant.

Ankole to Ruwenzori, appearing again on Elgon: Kigezi in Ankole, and Mt. Elgon.

1364. **Alethe castanea woosnami** Og.-Grant. **Golden-crowned Rufous-backed Ground Thrush.**

Very much like *castanea*, but are less rufous on the mantle.

Forests of Uganda from Ruwenzori to Mabira: Butambara, Lugalambo, Kyetume.

1365. **Alethe poliocephala kikuyuensis** Jacks. **Kikuyu Buff-breasted Ground Thrush.**

? *A. p. akeleyi* Mearns.

A good race, being very large and with a greyer crown and less rufescent mantle. It ranges from Kenia to the forests of Kikuyu and the Mau, and meets with *carruthersi* in the Nandi district. A specimen from Kakamegoes is indistinguishable from *kikuyensis*, yet all the other birds from this district are *carruthersi*!

Nairobi, Kikuyu, Kyambu, Kenia, Mau, and Kakamegoes.

1366. **Alethe poliothorax carruthersi** Og.-Grant. **Uganda Buff-breasted Ground Thrush.**

Less rufous than *poliothorax*, ranging throughout Uganda, occupying the same area as *Alethe woosnami*, but extending further, being plentiful in the North Kavirondo Forests and Nandi.

Lugalambo, Mubango, Bugoma, in Uganda; Kakamegoes and Kaimosi.

1367. **Lioptilus atriceps** Sharpe. **Black-headed Lesser-fronded Thrush.**

Not very common in Uganda, but more plentiful in the Kivu area.

Kigezi in South Ankole.

1368. **Lioptilus rufocinctus** Rothsch.

May possibly occur in the Kigezi country of South-west Uganda.

1369. **Lioptilus abyssinicus** Rüpp. **Grey-headed Lesser Ground Thrush.**

My birds from East Africa are not quite so rufous on the back as specimens from Abyssinia, but the series from the latter locality is insufficient. This bird is found on all the forest-clad highlands from Elgon to North Kikuyu and Mt. Kenia, but does not occur in the South Kikuyu Forests.

Elgon, Maraquet, Elgeyu, Molo, Londiani, Kenia.

1370. **Lioptilus kilimensis** Shell. **Kilimanjaro Lesser Ground Thrush.**

Apparently confined to the Kilimanjaro Range.

1371. **Bathmocercus rufus jacksoni** Sharpe. **Little Rufous Forest Chat.**

Young birds are uniform dull olive-brown, rather darker on the abdomen.

Elgon, south along the Nandi Range to Mau : Elgon, Bukedi ; Kakamegoes and Nyarondo.

1372. **Malacocincla fulvescens ugandae** van Som. **Uganda White-throated Thrush.**

A series of forty-eight specimens from all parts of Uganda confirms the characters claimed for this race. The range would be the forest region throughout Uganda, including Mt. Elgon, south into the Nandi Range.

Budongo, Bugoma, Butambara, Mubendi, Lugalambo, Kyetume, Entebbe, Bukedi ; Kibras and Kakamegoes.

1373. **Malacocincla minuta** van Som. **Little Olive Ground Thrush.**

This is probably a race of *rufipennis* Sharpe. It was erroneously described as a form of *albipectus*, which is, according to Og.-Grant, the same as *rufipennis*, but I am now convinced that "*albipectus* Rchw." is a distinct species. As in *rufipennis*, these birds have olive crowns, not greyish and distinct from the colour of the mantle, and they have a fulvous tinge to the breast, forming a more or less complete band. The underside is never uniform white from the throat to the vent. The feet are olive-grey-brown, in the dry skin they are olive. The type, which is sexed ♂, is probably a female.

In these birds the feathers of the throat and breast have not got a scaly appearance as in *barakae ? = albipectus*.

West to Central Uganda : Mabira, Bugoma, Budongo.

1374. **Malacocincla barakae** Jacks. **White-breasted Ground Thrush.**

? = *M. albipectus* Rchw.

As mentioned above, Og.-Grant asserts that this bird is the same as *albipectus* and that *albipectus* is the same as *rufipennis*, but I cannot agree. I have a good series of this bird and of *rufipennis*. What has probably given rise to the error is, that *rufipennis* and *albipectus* both occur in Camaroon. Reichenow gives a plate of his *albipectus* in his *Vög. Afrikas* which agrees very well with *barakae*, but not at all with *rufipennis*. The characters by which these birds can be

distinguished from *rufipennis* are : Head olive, of a different colour to the back ; sides of head greyer ; underside white with a tinge of olive on the sides of the breast ; the feathers are of a scaly character, *i.e.* the edges are rounded and sharply cut, not soft. These birds have grey-brown legs, which become pale when dry, not dark as in *minutus*. Besides, the young are quite different.

Uganda to Elgon and North Kavirondo : Budongo, Bugoma, Mabira, Lugalambo, Elgon ; Kakamegoes and Kaimosi.

1375. **Malacocincla pyrrhopterus** Rchw. **Grey-breasted Ground Thrush.**

M. jacksoni Sharpe.

M. kivuensis Neum.

Some of these birds have the crown tinged olive, others greyish, and as Neumann separated the Kivu birds because of the greyish crown, it is probable that his *kivuensis* is a synonym. My three Ankole birds are not separable from Mau specimens. It is strange, however, that if these birds are the same there should be a great break in their distribution—namely, the area between Ruwenzori and Mt. Elgon, practically the whole of Uganda ! They do not extend by way of the south shore of Victoria Nyanza.

Elgon and Mau to Aberdare Mts., reappearing in Western Uganda : Molo, Maraquet, Kaimosi, Kakamegoes, Elgon, and South Ankole.

1376. **Saxicola rubetra** Linn. **Whin Chat.**

Very common migrant.

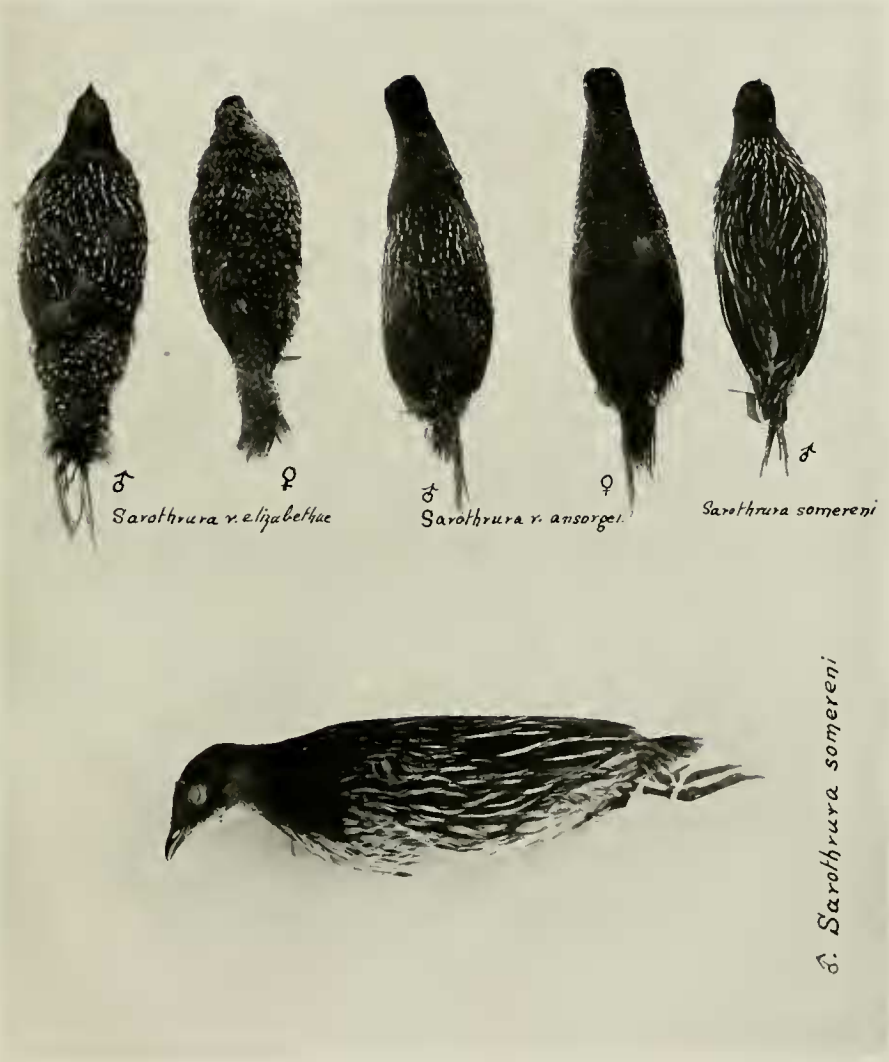
Masindi, Lugalambo, Elgon ; Naivasha, Kisumu, Mumias, and Nairobi.

1377. **Saxicola torquatus axillaris** Shell. **East African Stone Chat.**

Much variation exists in the extent of brown on the breast, some birds being entirely without the breast-band. East African examples are larger than Uganda ones.

Throughout Uganda and East Africa, except in the coastal region and thorn-bush country.

South Ankole, Budu, Busiro, Masindi, Entebbe, Lugalambo, Elgon ; Kisumu, Nakuru, Naivasha, Molo, and Burnt Forest.



VARIOUS FORMS OF SAROTHRURA.

CORYTHORNIS CRISTATUS (*Pall.*).

Photograph from life.

CORYTHORNIS CRISTATUS (*Vall.*)

Photograph from life.

CORYTHORNIS CRISTATUS (*Pall.*)

Photograph from life

APALIS FLAVOCINCTA (*Sharpe*).

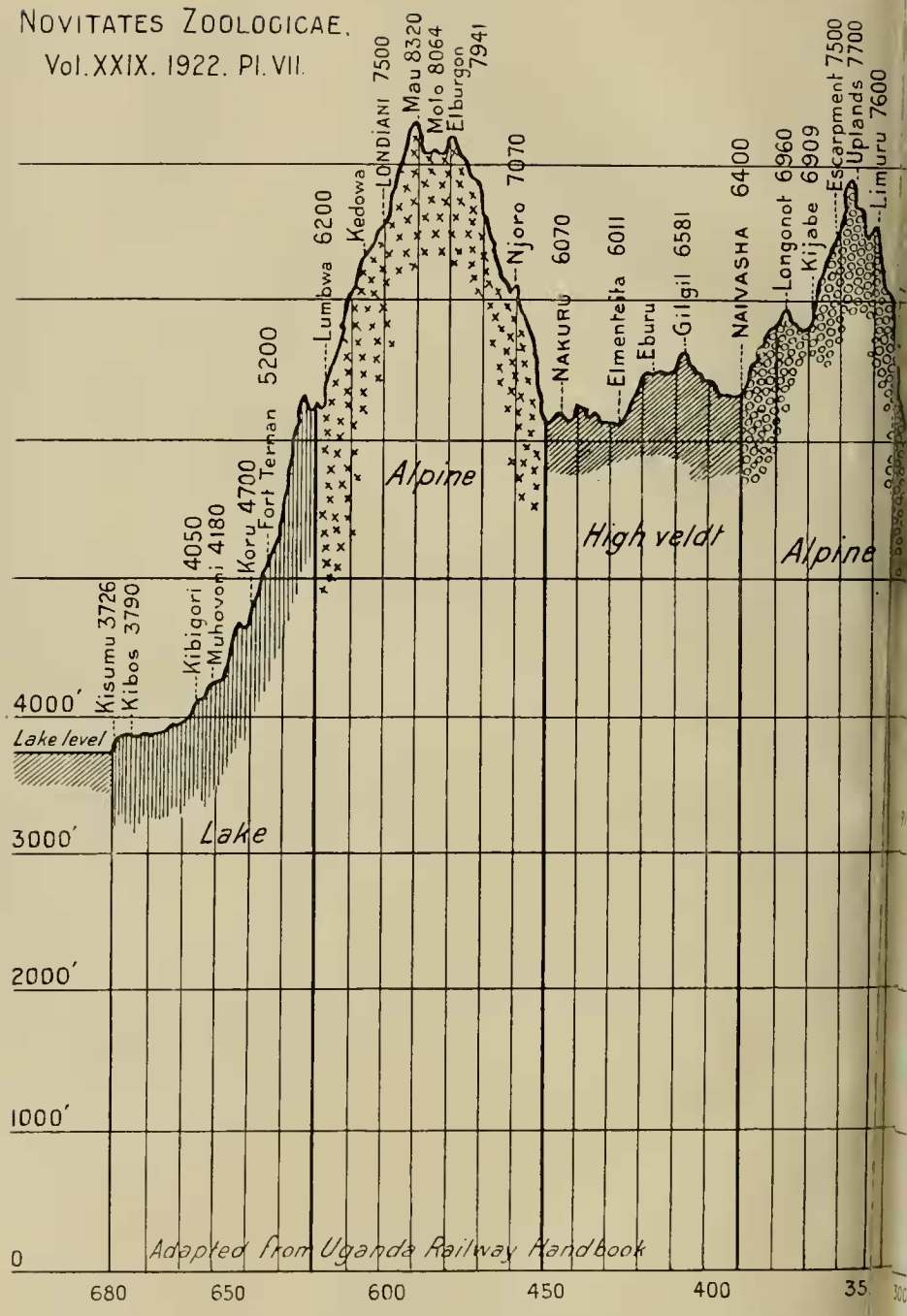
Female with a piece of vegetable down for the lining of its nest.

Photograph from life.

CALAMOCICHLA NILOTICA.

Male at nest.

Photographed from life.



LONGITUDINAL SECTION along the UGANDA RAILWA

bwing avifaunal areas. *Horizontal 1"=50 miles. Vertical 1"=1200 feet*